DECOMPRESSION TABLES AND PROCEDURES

FOR COMPRESSED AIR DIVING

BASED ON THE

DCIEM 1983 DECOMPRESSION MODEL

DEFENCE AND CIVIL INSTITUTE
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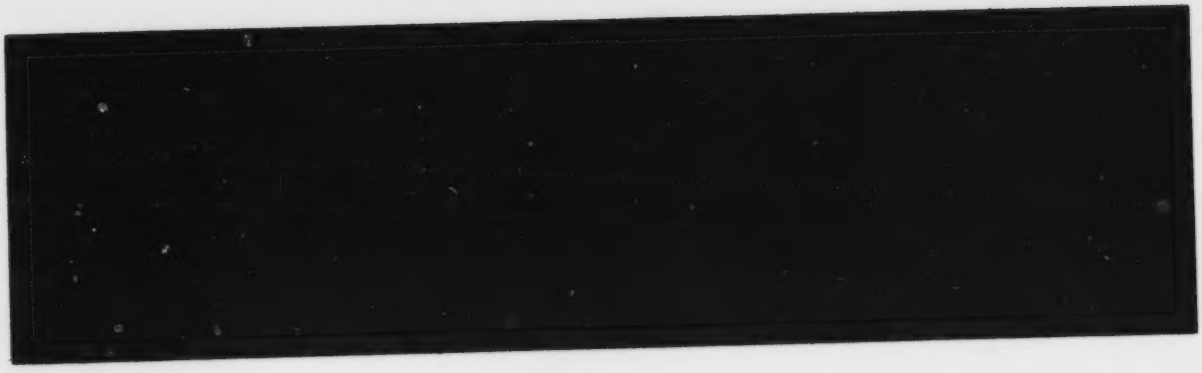

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DECOMPRESSION TABLES AND PROCEDURES FOR COMPRESSED AIR DIVING BASED ON THE DCIEM 1983 DECOMPRESSION MODEL

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ABSTRACT

Decompression tables and procedures for compressed air diving based on the **DCIEM 1983 DECOMPRESSION MODEL** are presented. **Standard Air, In-Water O_2,** and **SurD O_2** decompression tables, **Repetitive Diving** procedures and **Altitude Diving** corrections are also provided.

These decompression tables and procedures have been validated by manned experiments at DCIEM employing Doppler ultrasonic bubble detection methods and were found to be safer than the decompression tables and procedures currently used by Canadian Forces divers for compressed air diving. They are recommended for adoption by the Canadian Forces.

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The Department of National Defence of Canada and the Defence and Civil Institute of Environmental Medicine waive any and all responsibilities for the use of these tables and procedures by anyone not specifically authorized to do so.

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DCIEM 1983 AIR DIVING TABLES (METRES)

I	DCIEM 1983 Standard Air Table
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INTRODUCTION

This report presents decompression tables and procedures based on the **DCIEM 1983 DECOMPRESSION MODEL** for compressed air diving (1) in metres of seawater (msw) and feet of seawater (fsw). **Standard Air, In-Water Oxygen** and **Surface Oxygen** tables as well as **Repetitive Diving** procedures and **Altitude Corrections** are provided.

Although no realistic decompression procedures can totally eliminate the occurrence of decompression sickness, it is felt that a more conservative approach to decompression procedures than those published in the United States Navy (USN) and Royal Navy (RN) diving manuals is necessary (2,3).

Figure 1 provides a simple comparison of the DCIEM, USN and RN Standard Air decompression tables. The DCIEM table is consistently more conservative than the USN table and RN Table 11. As the DCIEM Oxygen decompression tables are derived from the same basic model, these tables are equally conservative.

Experienced divers have long believed that the USN Standard Air table often does not provide quite sufficient decompression and therefore apply the "one longer bottom time" rule for hard working dives quite regularly. For more severe exposures, the actual decompression is often further increased by the "one longer plus one deeper" modification.

Figure 2 shows that when the "one longer" rule is applied to the USN table (USN+1), the DCIEM and USN methods result in similar decompression times - except at extended bottom times. If, however, the "one longer plus one deeper" philosophy is applied in this region, the results are again very similar.

The evaluation of the DCIEM 1983 model (4,5) using Doppler ultrasonic bubble detection procedures has shown that the basic conservatism of this model is indeed justified and necessary. Experimental working dives to 72 msw for 40 minutes bottom time have shown this model as safe in the exceptional exposure range as in the normal air diving range. This is attributed to the fact that the relative conservatism of the DCIEM model increases as bottom times are extended. Figure 3 shows some of the profiles examined during the model validation process.

For short, shallow dives, the DCIEM model is perhaps too conservative. However, this extra margin of safety - in the region where most of the diving by "novice" divers and "occasional" divers is done - is not considered overly restrictive for recreational diving.

The definition of limits is considered an essential part of the decompression table development process. The air diving limits shown in Figure 4 are proposed for the Canadian Forces. These limits are not dictated by the DCIEM 1983 Decompression Model. Rather, they are based on a consensus opinion of what are considered realistic maximum exposures for compressed air diving in typical Canadian waters. They also define the scope of the table validation process and provide guidance for planning diving operations.

GENERAL PROCEDURES

(DCIEM 1983 DECOMPRESSION TABLES)

The definitions, procedures and rules presented here are applicable to the DCIEM 1983 decompression tables for air diving in general. Detailed procedures for the various tables are presented later.

1. **DEFINITIONS**

a. **DESCENT RATE** - 18 msw/min (60 fsw/min) or slower.

b. **BOTTOM TIME** - The time from leaving the surface to leaving the bottom.

c. **ASCENT RATE** and **TRAVEL** between stops - 18 msw/min (60 fsw/min).

d. **ASCENT TIME** to a stop is included in that stop time

The actual time spent at a stop equals "tabulated" stop time minus travel time to that stop at 18 msw/min.

Example 1 - Dive 54 msw/30 min - Standard Air Decompression.
First stop from Std Air Table is 3 min at 18 msw.
Travel time to first stop at 18 m/min is 2 min.
Therefore, actual time at 18 msw stop is 1 min.

2. **VARIATIONS IN RATE OF ASCENT**

a. ASCENT RATE **TOO SLOW:**

(1) **delay deeper** than half maximum depth of dive

DELAY ADDED to BOTTOM TIME and decompress in accordance with new bottom time;

(2) **delay shallower** than half maximum depth of dive

DELAY ADDED to "actual" STOP TIME of next stop.

b. ASCENT RATE TO FIRST STOP **TOO FAST:**

No correction required ("actual" time at stop equals "tabulated" stop time minus actual travel time).

c. ASCENT RATE **TOO FAST** (no stops required):

Observe diver for at least one hour.

3. **OXYGEN RELATED PROBLEMS**

a. **OXYGEN PROBLEMS IN WATER** at 9 msw (30 fsw) O_2 stop:

(1) **MINOR SYMPTOMS** of O_2 toxicity or loss of O_2

(a) switch diver to air, continue decompression on Standard Air table.
The O_2 time is "good" time for decompression purposes and is subtracted from 9 msw and/or 6 msw and/or 3 msw air stop times.

Example 2 - Dive 27 msw/60 min - In-Water O_2 table calls for a 26 min stop on O_2 at 9 msw.

Situation - After 14 min on O_2, diver reports possible O_2 toxicity symptoms.

Reaction - The diver is switched to air immediately and ventilated. The Standard Air table calls for:

9 msw - 2 min stop,
6 msw - 8 min stop, and
3 msw - 31 min stop.

The 14 minutes spent on O_2 is "good" time.

Therefore, the 9 msw, the 6 msw and 4 minutes of the 3 msw stop have been satisfied and 27 minutes of decompression at 3 msw remain. Pull diver to 3 msw and complete decompression.

(2) **SERIOUS, INCAPACITATING SYMPTOMS** of CNS O_2 toxicity:

(a) diver off O_2, ventilate, **STABILIZE** (Note 1); and

(b) surface diver carefully to reduce risk of embolism. Treat for possible embolism if any uncertainty exists. Otherwise, treat for omitted decompression and observe carefully.

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NOTE 1: Diver is not to be brought to the surface while convulsing.

b. **OXYGEN PROBLEMS IN RECOMPRESSION CHAMBER** (RCC)(SurD O_2):

(1) **LOSS** of O_2:

(a) switch diver to Standard Air table (12 msw stop). O_2 time is "good" time and is subtracted from 12 msw and/or 9 msw and/or 6 msw and/or 3 msw stop.

Example 3 - Dive 42 msw/30 min.

Situation - After 24 min on O_2 in RCC at 12 msw, O_2 is lost.

Reaction - The Standard Air table 42 msw/30 min calls for:

12 msw - 4 min stop,
9 msw - 6 min stop,
6 msw - 8 min stop, and
3 msw - 28 min stop.

The 24 minutes spent on O_2 satisfies the 12, 9, and 6 msw stops and 6 minutes of the 3 msw stop.

Therefore, ascend to 3 msw and do remaining 22 min of 3 msw air stop to complete the decompression.

(2) **MINOR SYMPTOMS** of O_2 toxicity:

(a) diver off O_2;

(b) after symptoms are gone, either:

(1) remain on air for additional 15 mins and then resume O_2 from time of interruption; or,

(2) switch to Standard Air table as in b(1)(a) above, and complete decompression on air.

(c) if O_2 breathing is resumed and O_2 symptoms recur, switch to Standard Air table as in b(1)(a) above, and complete decompression on air.

(3) **SERIOUS, INCAPACITATING SYMPTOMS** of CNS O_2 toxicity:

(a) diver off O_2, **STABILIZE** (Note 1); and

(b) switch to Standard Air table as in b(1)(a) above, and complete decompression on air.

4. **OMITTED DECOMPRESSION**

a. **RCC immediately available** (less than 7 minutes):

(1) if 9 msw stop was completed, switch to SurD O_2 and do tabulated RCC O_2 stop; or

(2) if 9 msw or deeper stops were not completed - TREAT using Table 5, US Navy Diving Manual (2).

b. **RCC not immediately available:**

The preferred action is to get the diver to a RCC for treatment. The diver should receive 100% O_2 by double-seal oronasal mask enroute to the RCC. However, the supervisor has the following option if the situation warrants it:

(1) return the diver to the next deeper stop where the omission occured and repeat this stop. Continue decompression in accordance with the original schedule; or

(2) if no deeper stop was called for, spend the time of the first stop at the next deeper stop and repeat the total schedule.

Example 4 - Dive 39 msw/40 mins.

Standard Air table calls for:

12 msw - 4 min stop,
9 msw - 7 min stop,
6 msw - 9 min stop, and
3 msw - 39 min stop.

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NOTE 1: RCC depth is not to be altered while the diver is convulsing.

Situation - Diver surfaces after completing the 12 msw stop, the 9 msw stop and 3 min of the 6 msw stop.

Reaction - Recompress immediately to 9 msw for 7 min and resume schedule beginning with the 6 msw stop.

Example 5 - Same dive.

Situation - On ascent to 12 msw stop, diver loses control and surfaces (blow-up). Diver is OK (totally asymptomatic).

Reaction - Recompress immediately to 15 msw for 4 minutes and then complete total schedule.

5. REPETITIVE DIVING

Repetitive diving is permitted only in the normal air diving range. After an exceptional exposure dive, it is recommended that no diving be done for 18 hrs.

6. EXCEPTIONAL EXPOSURE DIVING

Compressed air diving in the exceptional exposure range shown in Figure 4 should only be conducted under truly exceptional circumstances. Only **SurD O_2** decompression (with In-Water O_2 as back-up) should be considered for such exposures.

DECOMPRESSION TABLES

1. STANDARD AIR DECOMPRESSION

The **DCIEM Standard Air** decompression table is contained in Appendix I. Each depth segment in the table is divided into two sections by a line which corresponds to the normal air diving limit in Figure 4. "Repetitive Groups" are not shown for dive profiles beyond this line (exceptional exposures) since repetitive diving is not recommended in this range.

The extent of this table is twice the maximum bottom times for the normal air range. This exceeds the exceptional exposure limit of Figure 4 in some cases, and is due to the fact that the "Effective Bottom Time" of a repetitive dive can be twice the bottom time of the initial dive (see Repetitive Diving).

Users of this **Standard Air** decompression table are cautioned, however, that it has been validated by manned experiments to the limit of the normal air diving range only. Oxygen decompression (SurD O_2) should be used for exceptional exposure diving. The procedure for **Standard Air** decompression is:

a. descend at 18 msw/min (60 fsw/min) or slower; and

b. ascend at 18 msw/min to the indicated stops and remain at each stop for the tabulated time. (The stop time at each stop includes the ascent time to that stop.)

The **"Short" Standard Air** table presented in Appendix IA is essentially a simplified version of the main table. There are, however, two modifications included in this table. These are an extension of the no-decompression limits and a slight reduction in decompression times for short, shallow dives. Although experiments have proven these modified no-decompression limits safe (5), "novice" and "infrequent" divers are still encouraged to abide by the limits predicted by the DCIEM 1983 model which are shown in the main **Standard Air** table in Appendix I. The short table is self-explanatory and the procedures are identical to those of the main table. (It is suggested that this table be published with the Repetitive Diving procedures on the reverse side.)

2. IN-WATER OXYGEN DECOMPRESSION

The benefits of using oxygen for decompression are well known and applied universally with various SurD O_2 procedures. In military diving operations, however, it is not always possible to have a chamber on-site. Yet, it is often possible to supply the diver with O_2 (closed or semi-closed apparatus with pure O_2 supply, lightweight surface supplied systems, etc). Therefore, it was decided to apply O_2 in the water - albeit, only at the conservative depth of 9 msw.

The **DCIEM In-Water O_2** decompression table is presented in Appendix II.

The procedure for **In-Water O_2** decompression is:

a. do a normal ascent as for Standard Air to 9 msw (30 fsw) and stop;

b. switch the diver's gas to O_2; the diver remains on O_2 at 9 msw for the tabulated stop time (ascent time to 9 msw from the previous stop or from the bottom - if no air stops are required - is included in the tabulated O_2 stop time); and

c. ascend to the surface in one minute (9 m/min).

A **"short"** version of the **In-Water O_2** table (with the same modifications previously described) is contained in Appendix IIA. It should be noted that in this table, the decompression times are **O_2 times** at the 9 msw stop and do not include the ascent time to the stop at 18 msw/min.

Figure 5 shows a comparison of the DCIEM method with the Royal Navy procedure which starts Oxygen breathing at 18 msw (RN Table 13). The **In-Water O_2** procedure reduces the total decompression time by 35-40% over the Standard Air method.

The **DCIEM In-Water O_2** decompression table can also be applied to repetitive diving, and has been validated for the normal air diving range shown in Figure 4.

3. SURFACE OXYGEN DECOMPRESSION

The **DCIEM SurD O_2** table is contained in Appendix III. The specific procedures for its application are:

a. do a normal ascent as for Standard Air to 9 msw (30 fsw) or the surface (if no in-water stop is shown);

b. remain at the 9 msw stop for the tabulated stop time (stop time includes ascent time to 9 msw stop at 18 msw/min);

c. ascend to the surface in 1 minute (9 msw/min) and recompress on O_2 to 12 msw (40 fsw) in the RCC; the Surface Interval - the time from leaving the 9 msw water stop (or the bottom, if no in-water stop is required) to reaching the 12 msw RCC stop - must not exceed 7 minutes (Note 1);

d. remain on O_2 at 12 msw for the tabulated stop time with 5 minute air breaks after every 30 minutes on O_2 (Note 2); and

e. ascend to the surface on O_2 in 2 minutes (6 msw/min).

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NOTE 1: The maximum Surface Interval of 7 minutes was chosen to enhance the operability of the procedure and to reduce the chances of "omitted decompression" during operations. Extensive experimentation using the full 7 minutes Surface Interval has proven this procedure safe.

2: The 5 minute air breaks after 30 minutes on O_2 were included in calculating the 12 msw O_2 stop times. The "*" following the O_2 stop times in the tables represent the number of air breaks. The tabulated 12 msw stop times are "O_2 Time" only, while the Total Decompression Time column includes the air breaks. If no "*" follows a tabulated 30 min O_2 time, no air break is taken prior to the ascent on O_2. If only one "*" follows a tabulated 60 min O_2 time, no second air break is taken prior to ascent on O_2.

The **DCIEM SurD O_2** table has been validated by manned experiments to the limits of the exceptional exposure range shown in Figure 4. **SurD O_2** is the preferred method for all compressed air diving requiring significant amounts of decompression, and it is the only method recommended for exceptional exposure diving. **Repetitive diving** can be conducted using **SurD O_2** and this has been successfully validated (see Repetitive Diving). Figure 6 shows a comparison of the DCIEM and USN **SurD O_2** procedures. The methods are virtually identical, except for the air breaks in the RCC and the additional time on O_2 at 12 msw dictated by the DCIEM model. Figure 7 provides a similar comparison of the DCIEM and Royal Navy procedures.

4. REPETITIVE DIVING PROCEDURES

Repetitive Diving is permitted only in the normal air diving range and has been validated using the **Standard Air, In-Water O_2** and **SurD O_2** decompression methods.

The **Repetitive Dive Group** letters (A-O) shown beside each dive profile in the normal air range of the DCIEM tables are used in conjunction with the **Repetitive Factors** table presented in Appendix IV. These correction factors are based on the first dive and Surface Interval (to determine the "residual" nitrogen) in conjunction with any possible depth (within the normal air diving range) of the second dive.

The "worst-case scenario approach" - a "severe" first dive (leaving maximum "residual" nitrogen) followed quickly by a "moderate" second dive (requiring little or no decompression by itself) was used throughout this process. Therefore, the **Repetitive Factors** presented in Appendix IV result in more decompression than is actually required for many dive combinations. (For optimum time-efficient decompression in repetitive diving, a computer with memory such as the DCIEM XDC-2 decompression computer must be employed "real-time".)

The **DCIEM Repetitive Diving** procedure is:

a. take the **Repetitive Dive Group** letter of the first dive and enter the **Repetitive Factor** table;

b. find the **Repetitive Factor** (RF) corresponding to that letter and the applicable Surface Interval column;

c. **multiply** the bottom time of the second dive by this **Repetitive Factor** to obtain the **Effective Bottom Time** (EBT) of the second dive; and

d. **decompress** the diver for the **Effective Bottom Time** and depth of the second dive.

Example 1 - First dive - 42 msw/30 min,
Surface Interval - 4 hrs, 10 min,
Second dive - 36 msw/30 min, and
Decompression Method - "SurD O_2".

a. Repetitive Dive Group of first Dive - "K";

b. Repetitive Factor of dive group "K" after 4 hrs, 10 min is "1.5";

c. The Effective Bottom Time of the second dive is 30 min x 1.5 = 45 min; and

d. Therefore, decompress the diver on the 36 msw for 45 min schedule.

Although only "2-dive" combinations using the same decompression method for both dives have been done to date, there is no reason why different decompression methods cannot be used for each dive in a series. For example, a first "inspection" dive of 45 msw/10 min decompressed on Standard Air (short decompression) could be followed by a 45 msw/40 min "working" dive decompressed on SurD O_2 (lengthy decompression).

Further, multiple dives can be performed if the Repetitive Dive Group of the Effective Bottom Time and depth profile of the second dive is used as that of a "first" dive to find a new Repetitive Factor and so on.

Example 2 - First Dive 36 msw/15 min,
Surface Interval - 40 min,
Second Dive 36 msw/30 min,
Second Surface Interval - 2 hrs, and
Third Dive 36 msw/30 min.

a. Repetitive Dive Group of First Dive - "D" (using Standard Air because little decompression is required);

b. EBT of Second Dive is 45 min (1.5 x 30 min) (using SurD O_2 because considerable decompression is required);

c. 36 msw/45 min using SurD O_2 table is group "J";

d. EBT of Third Dive is 54 min (1.8 x 30 min); and

e. Therefore, the third dive is decompressed in accordance with the 36 msw/55 min schedule (SurD O_2 would be the preferred method since it calls for only 12 min of in-water stops vs. 78 min for Standard Air).

The Repetitive Factors in Appendix IV have been cut off - arbitrarily - at 2.0. It is felt that after a strenuous first dive, the Surface Interval should be sufficient in length to reduce the "residual" nitrogen level of the diver to that degree. (This, in effect, defined the limits of the printed tables.) (Note 1).

It should be noted that the Repetitive Dive Group for a specific dive profile is not always the same in the three major tables. This is due to the fact that Oxygen decompression is more "efficient" than Standard Air decompression. Therefore, the Repetitive Groups in the oxygen tables will always be equal to, or lower (never higher) than those in the Standard Air tables for the same dive.

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NOTE 1: If a second dive must be made before the Surface Interval reduces the Repetitive Factor to 2.0, add the two bottom times to obtain the Effective Bottom Time and use the deeper depth of the two dives and the EBT for determining the decompression schedule.

5. DIVING AT ALTITUDE

Appendix V provides **depth corrections** for determining the decompression profiles and **decompression stop depths** to apply when diving at altitudes.

Divers are cautioned that most commonly used depth gauges will not read "actual" water depth at altitudes. Shot lines are recommended.

The procedure for using the **Altitude Corrections** table is:

a. determine the **actual** maximum water depth of the dive (and the altitude of the dive site);

b. find the correction for the actual depth and altitude from the table and **add** this to the actual depth to obtain the **effective depth;**

c. determine the decompression schedule from a decompression table using the **effective depth** and the actual bottom time;

d. change the decompression stop depths from the decompression table to the **actual stop depths** shown in the Altitude Corrections table. The stop times are **not** changed; and

e. **decompress** on this **altitude schedule** in accordance with normal procedures using the normal travel rates (which were used in calculating the corrections).

Example - Altitude of dive site 1900 m,
Dive 30 m (by shot line) for 23 min, and
Decompression - Standard Air.

a. Altitude Correction (from Table 5) is "+9 m";

b. Therefore, the "effective depth" is 39 m and the decompression schedule from Table 1 for 39 m/25 min is:

5 min stop at 9 m,
7 min stop at 6 m, and
11 min stop at 3 m.

d. "Actual stop depths" from Table 5 are 7.5 m, 5.0 m, and 2.5 m respectively; and

e. Therefore, the "altitude" decompression schedule is:

5 min at 7.5 m,
7 min at 5 m, and
11 min at 2.5 m.

SUMMARY

The **Standard Air, In-Water O_2,** and **SurD O_2** decompression tables presented here are based on the **DCIEM 1983 Decompression Model** and are considerably more conservative than the corresponding USN and RN tables. The procedures for their use are simple and have been proven effective.

The major tables (Tables 1, 2, and 3) are derived directly from the new model, while the **short** tables have been modified to be slightly less conservative for short, shallow dives. The new **Canadian Forces Air Diving Tables** based on the DCIEM 1983 model will incorporate these same modifications in the main Standard Air table.

The **DCIEM 1983** model is currently programmed in the **XDC-2** decompression computer and real-time computer control has been used for all model validation dives. Since printed tables are by necessity "rounded up" versions of the computer-generated decompression schedules, the actual decompression times employed for these validation dives have in all cases been slightly less than those in the corresponding printed tables. For the repetitive dive combinations examined, the actual decompression times used were considerably shorter than those resulting from the "table" method presented in this report.

In summary, it is submitted that the decompression tables and procedures presented in this report can satisfy all the decompression requirements for compressed air diving within the proposed limits.

ACKNOWLEDGEMENTS

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Figure 1 Comparison of the DCIEM 1983 decompression times for Standard Air decompression with those of the US Navy Standard Air Table and Royal Navy Tables 11-12.

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4 Air Diving Limits proposed for the Canadian Forces.

5 Comparison of the DCIEM In-Water O_2 decompression procedure with the Royal Navy method (RN Table 13).

6 Comparison of the DCIEM SurD O_2 decompression with the US Navy procedure.

7 Comparison of the DCIEM SurD O_2 decompression with the Royal Navy procedure (RN Table 15).

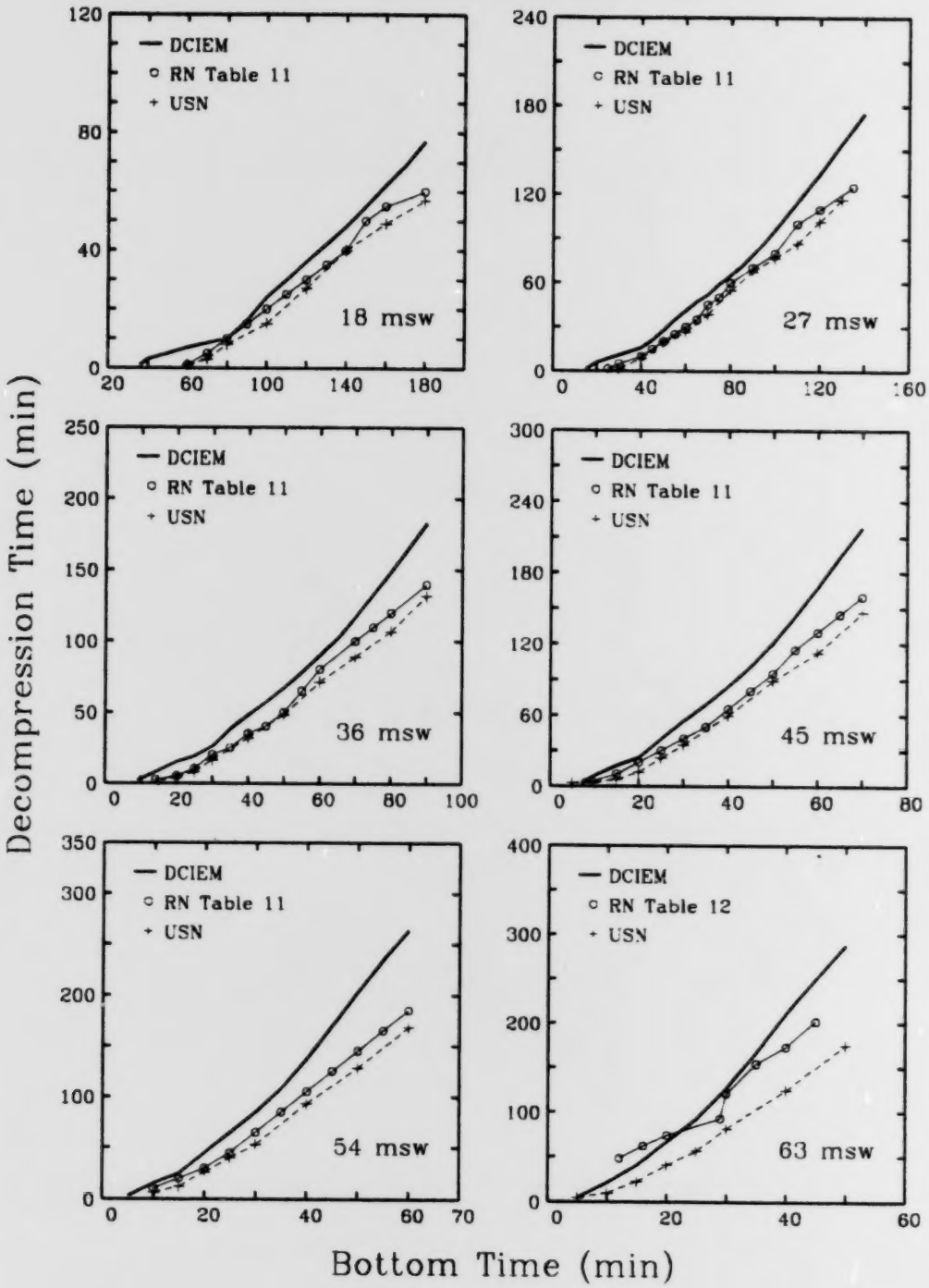

FIGURE 1

COMPARISON OF THE DCIEM 1983 DECOMPRESSION TIMES FOR "STANDARD AIR" DECOMPRESSION WITH THOSE OF THE US NAVY STANDARD AIR TABLE AND ROYAL NAVY TABLES 11-12.

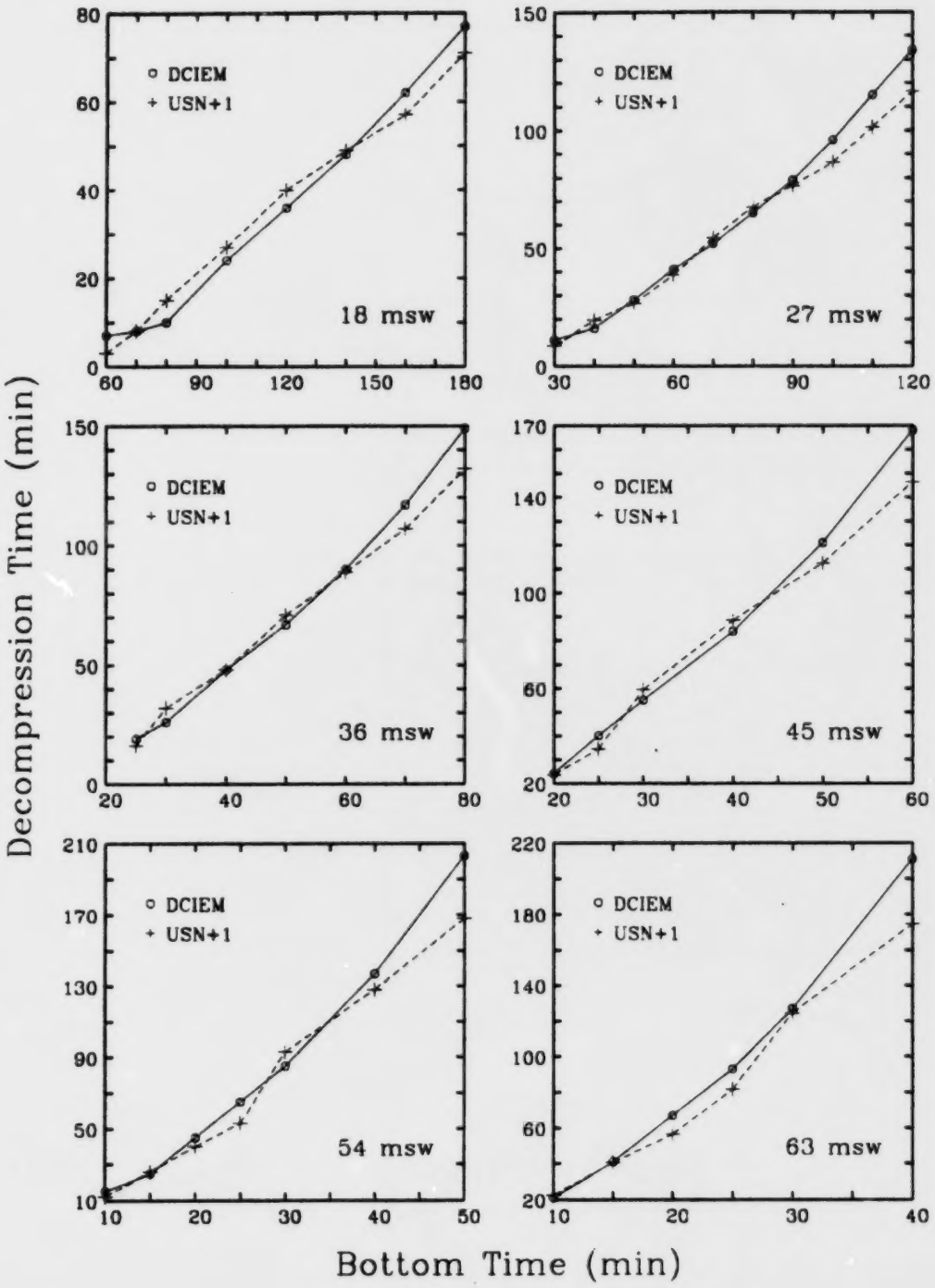

FIGURE 2

COMPARISON OF THE DCIEM 1983 TOTAL DECOMPRESSION TIMES FOR "STANDARD AIR" DECOMPRESSION WITH THE US NAVY USING THE "NEXT LONGER" BOTTOM TIME (USN+1).

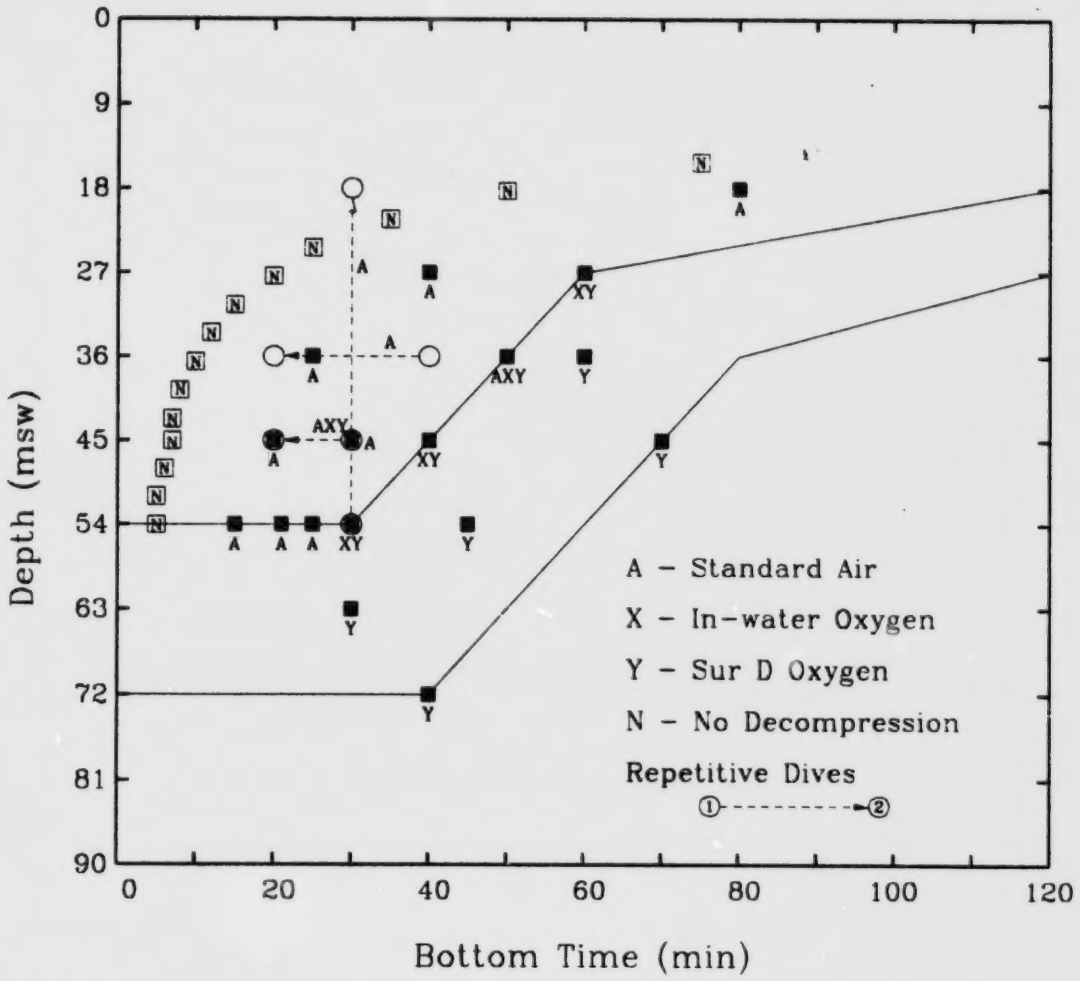

FIGURE 3

DIVE PROFILES EXAMINED DURING THE VALIDATION PROCESS OF THE DCIEM 1983 DECOMPRESSION MODEL

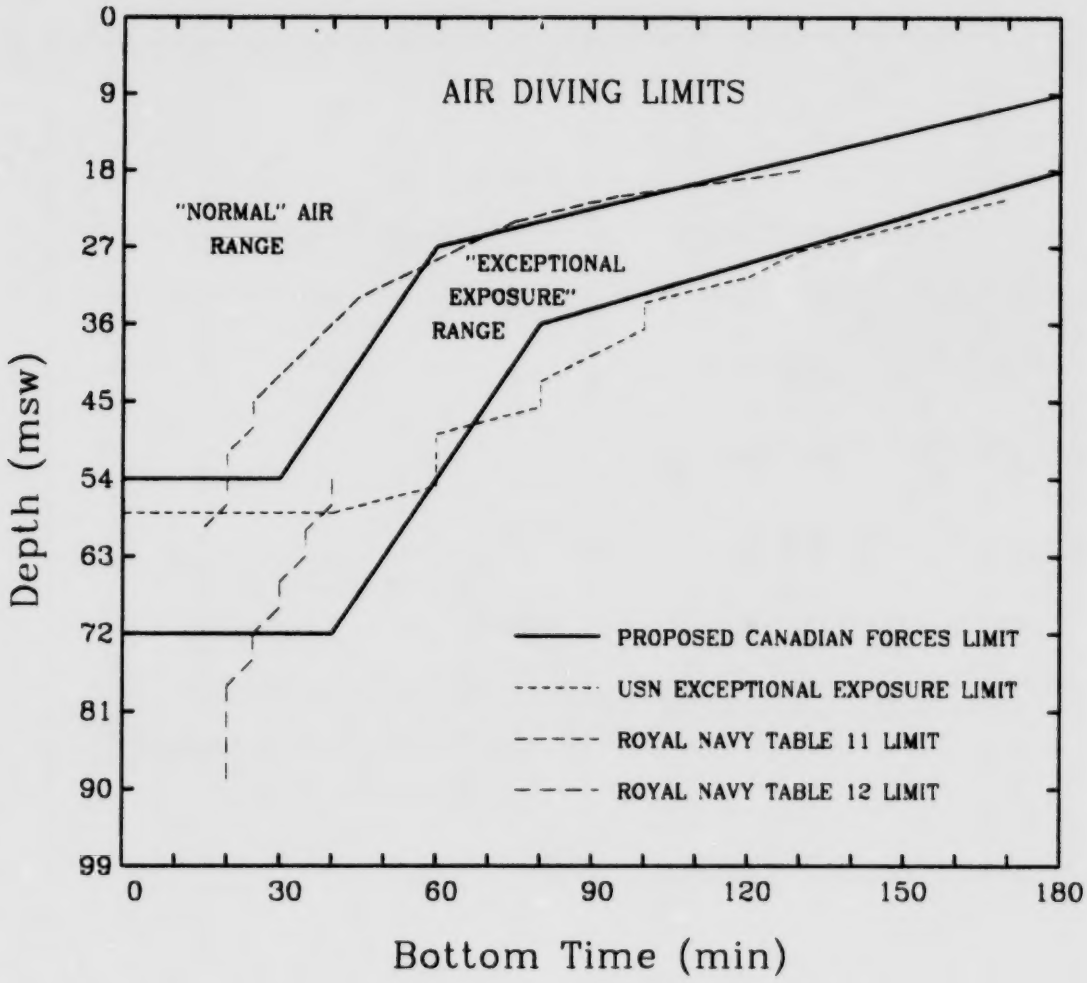

FIGURE 4

AIR DIVING LIMITS PROPOSED FOR THE CANADIAN FORCES

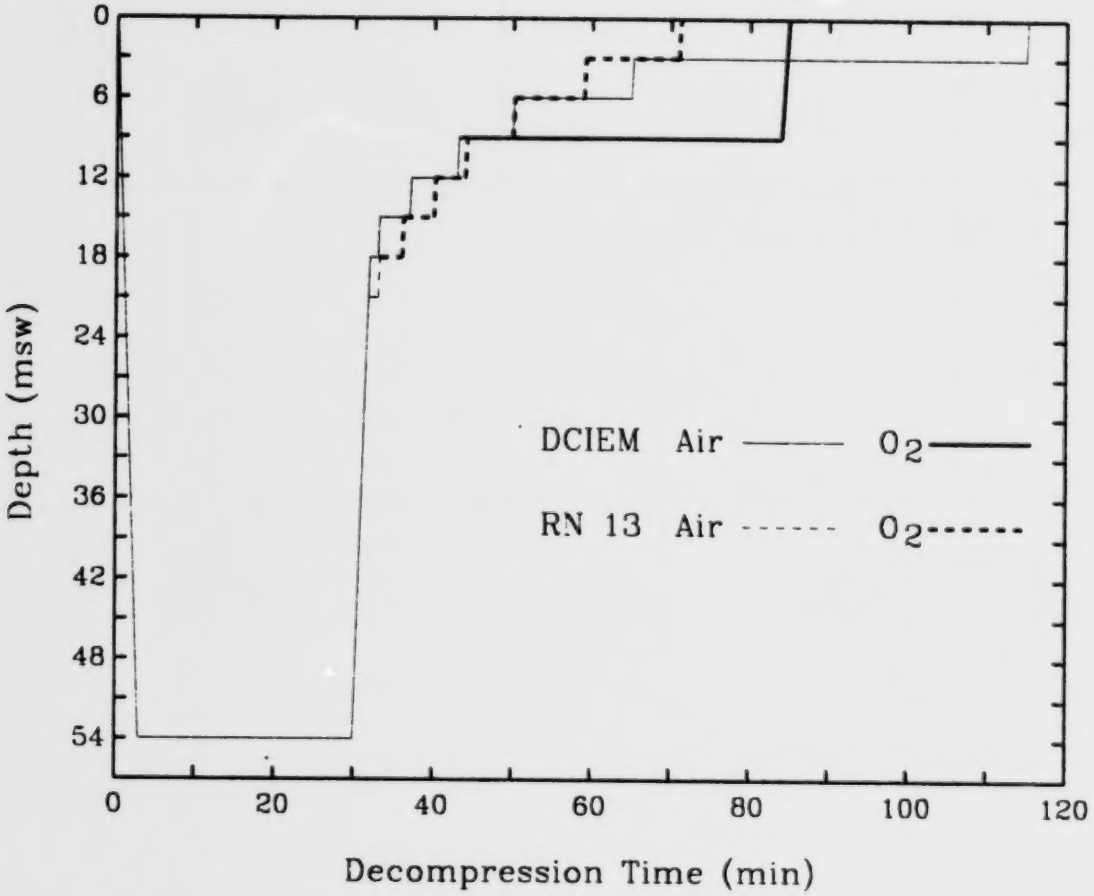

FIGURE 5

COMPARISON OF THE DCIEM "IN-WATER O_2" DECOMPRESSION PROCEDURE WITH THE ROYAL NAVY METHOD (RN TABLE 13)

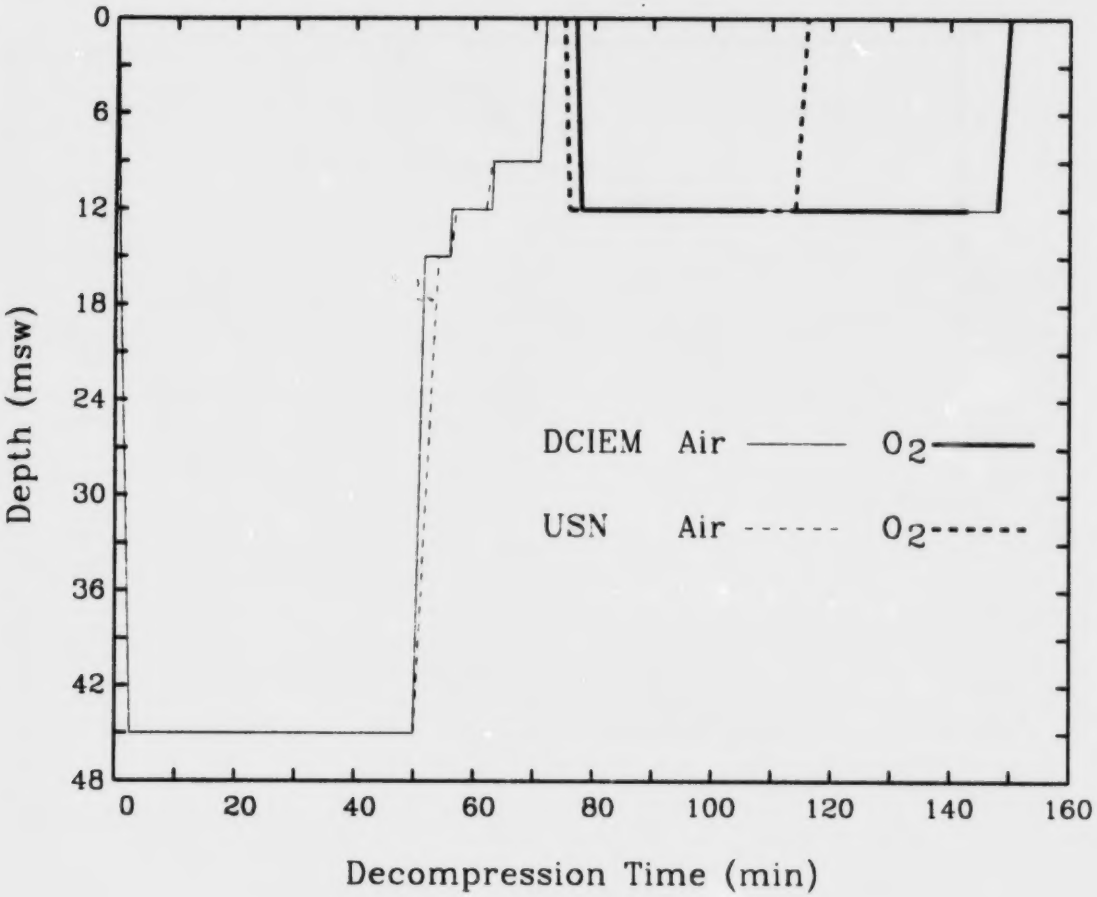

FIGURE 6

COMPARISON OF THE DCIEM "SURD O_2" DECOMPRESSION WITH THE US NAVY PROCEDURE

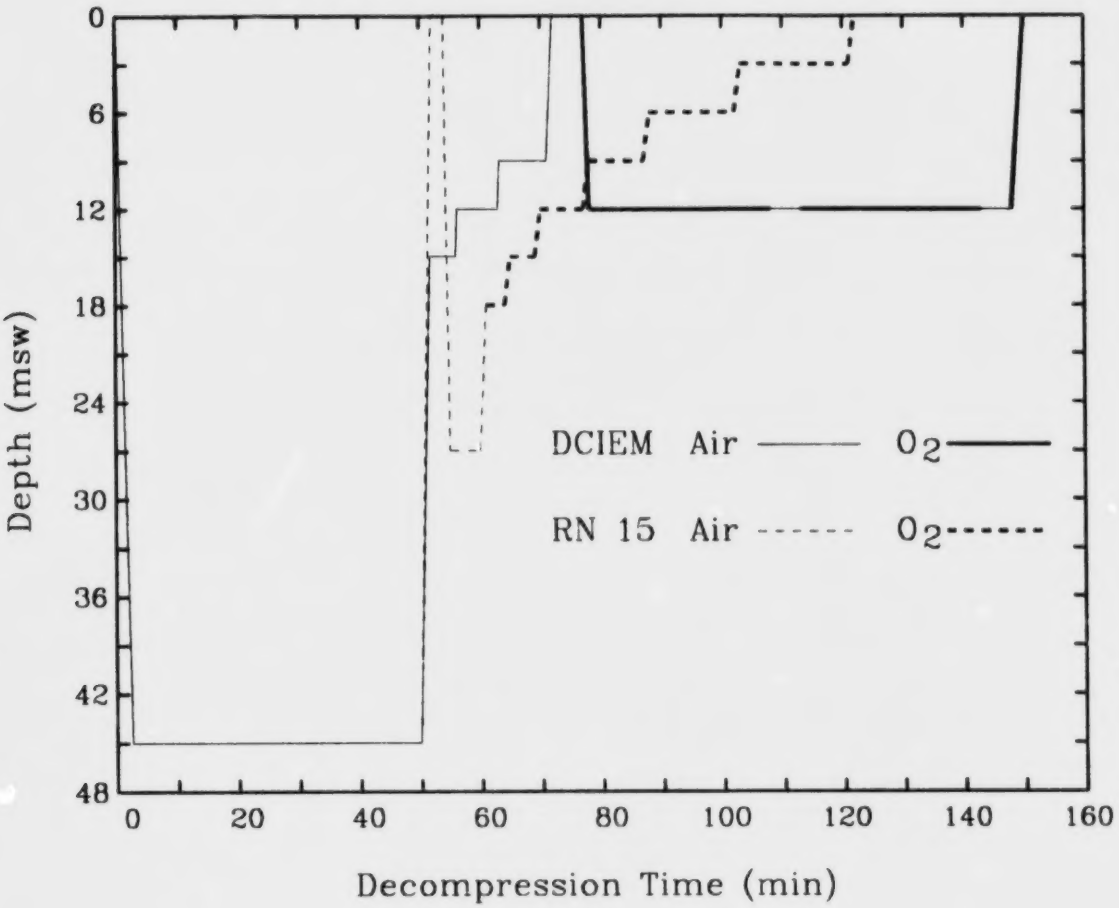

FIGURE 7

COMPARISON OF THE DCIEM "SURD O_2" DECOMPRESSION WITH THE ROYAL NAVY PROCEDURE (RN TABLE 15)

DCIEM 1983

AIR DIVING TABLES

(FEET)

APPENDIX I

DCIEM 1983 AIR DIVING TABLE 1

"STANDARD AIR"

DCIEM 1983 AIR DIVING TABLE 1 (FEET)
STANDARD AIR

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)							Decom. Time (min)	Repet. Dive Group
		70	60	50	40	30	20	10		
30	30	-	-	-	-	-	-	-	-	A
	60	-	-	-	-	-	-	-	-	C
	90	-	-	-	-	-	-	-	-	D
	120	-	-	-	-	-	-	-	-	F
	150	-	-	-	-	-	-	-	-	G
	180	-	-	-	-	-	-	-	-	H
	380	-	-	-	-	-	-	-	-	
	390	-	-	-	-	-	-	7	7	
	400	-	-	-	-	-	-	10	10	
	420	-	-	-	-	-	-	14	14	
	450	-	-	-	-	-	-	19	19	
	480	-	-	-	-	-	-	23	23	
40	30	-	-	-	-	-	-	-	-	B
	60	-	-	-	-	-	-	-	-	D
	90	-	-	-	-	-	-	-	-	G
	120	-	-	-	-	-	-	-	-	H
	150	-	-	-	-	-	-	-	-	J
	160	-	-	-	-	-	-	-	-	K
	180	-	-	-	-	-	-	2	2	L
	190	-	-	-	-	-	-	9	9	
	200	-	-	-	-	-	-	14	14	
	210	-	-	-	-	-	-	18	18	
	220	-	-	-	-	-	-	22	22	
	240	-	-	-	-	-	-	28	28	
	270	-	-	-	-	-	-	38	38	
	300	-	-	-	-	-	-	48	48	
	330	-	-	-	-	-	-	57	57	
	360	-	-	-	-	-	-	66	66	

DCIEM 1983 AIR DIVING TABLE 1 (FEET)
STANDARD AIR

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)							Decom. Time (min)	Repet. Dive Group
		70	60	50	40	30	20	10		
50	20	-	-	-	-	-	-	-	-	A
	30	-	-	-	-	-	-	-	-	C
	40	-	-	-	-	-	-	-	-	D
	50	-	-	-	-	-	-	-	-	E
	60	-	-	-	-	-	-	-	-	F
	70	-	-	-	-	-	-	3	3	G
	80	-	-	-	-	-	-	4	4	G
	100	-	-	-	-	-	-	6	6	I
	120	-	-	-	-	-	-	12	12	K
	130	-	-	-	-	-	-	18	18	L
	140	-	-	-	-	-	-	24	24	M
	150	-	-	-	-	-	-	29	29	
	160	-	-	-	-	-	-	33	33	
	170	-	-	-	-	-	-	38	38	
	180	-	-	-	-	-	-	43	43	
	200	-	-	-	-	-	-	53	53	
	220	-	-	-	-	-	-	63	63	
	240	-	-	-	-	-	-	74	74	
	260	-	-	-	-	-	-	86	86	
	280	-	-	-	-	-	-	97	97	
60	10	-	-	-	-	-	-	-	-	A
	20	-	-	-	-	-	-	-	-	B
	30	-	-	-	-	-	-	-	-	D
	35	-	-	-	-	-	-	-	-	D
	40	-	-	-	-	-	-	3	3	E
	50	-	-	-	-	-	-	5	5	F
	60	-	-	-	-	-	-	7	7	G
	80	-	-	-	-	-	-	10	10	I
	90	-	-	-	-	-	-	19	19	J
	100	-	-	-	-	-	-	26	26	K
	110	-	-	-	-	-	-	32	32	L
	120	-	-	-	-	-	2	37	39	M
	130	-	-	-	-	-	2	43	45	
	140	-	-	-	-	-	3	49	52	
	150	-	-	-	-	-	3	55	58	
	160	-	-	-	-	-	4	62	66	
	170	-	-	-	-	-	4	70	74	
	180	-	-	-	-	-	5	77	82	
	190	-	-	-	-	-	5	85	90	
	200	-	-	-	-	-	11	90	101	
	210	-	-	-	-	-	15	96	111	
	220	-	-	-	-	-	19	102	121	
	230	-	-	-	-	-	23	108	131	
	240	-	-	-	-	-	27	114	141	

DCIEM 1983 AIR DIVING TABLE 1 (FEET)
STANDARD AIR

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)							Decom. Time (min)	Repet. Dive Group
		70	60	50	40	30	20	10		
70	10	-	-	-	-	-	-	-	-	A
	20	-	-	-	-	-	-	-	-	C
	24	-	-	-	-	-	-	-	-	D
	30	-	-	-	-	-	-	4	4	D
	40	-	-	-	-	-	-	8	8	F
	50	-	-	-	-	-	-	10	10	G
	60	-	-	-	-	-	2	11	13	H
	70	-	-	-	-	-	3	19	22	J
	80	-	-	-	-	-	4	27	31	K
	90	-	-	-	-	-	5	34	39	M
	100	-	-	-	-	-	6	41	47	N
	110	-	-	-	-	-	7	48	55	
	120	-	-	-	-	-	8	56	64	
	130	-	-	-	-	-	9	65	74	
	140	-	-	-	-	-	11	74	85	
	150	-	-	-	-	-	17	81	98	
	160	-	-	-	-	-	22	89	111	
	170	-	-	-	-	-	27	98	125	
	180	-	-	-	-	-	31	107	138	
	190	-	-	-	-	-	38	115	151	
	200	-	-	-	-	2	39	123	164	
80	10	-	-	-	-	-	-	-	-	A
	15	-	-	-	-	-	-	-	-	C
	19	-	-	-	-	-	-	-	-	D
	25	-	-	-	-	-	-	6	6	E
	30	-	-	-	-	-	-	8	8	F
	40	-	-	-	-	-	2	10	12	G
	50	-	-	-	-	-	4	12	16	H
	55	-	-	-	-	-	5	17	22	I
	60	-	-	-	-	-	6	22	28	J
	65	-	-	-	-	-	7	27	34	J
	70	-	-	-	-	-	8	31	39	K
	75	-	-	-	-	-	9	35	44	L
	80	-	-	-	-	-	9	40	49	M
	85	-	-	-	-	-	10	44	54	
	90	-	-	-	-	-	11	48	59	
	95	-	-	-	-	-	11	53	64	
	100	-	-	-	-	2	10	58	70	
	110	-	-	-	-	3	14	66	83	
	120	-	-	-	-	3	20	76	99	
	130	-	-	-	-	4	24	87	115	
	140	-	-	-	-	5	29	98	132	
	150	-	-	-	-	5	35	109	149	
	160	-	-	-	-	6	40	120	166	

DCIEM 1983 AIR DIVING TABLE 1 (FEET)
STANDARD AIR

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)							Decom. Time (min)	Repet. Dive Group
		70	60	50	40	30	20	10		
90	10	-	-	-	-	-	-	-	-	A
	15	-	-	-	-	-	-	-	-	C
	20	-	-	-	-	-	-	6	6	D
	30	-	-	-	-	-	3	9	12	F
	40	-	-	-	-	-	6	11	17	H
	45	-	-	-	-	-	7	16	23	I
	50	-	-	-	-	-	9	21	30	J
	55	-	-	-	-	-	10	27	37	K
	60	-	-	-	-	2	9	32	43	L
	65	-	-	-	-	3	9	37	49	
	70	-	-	-	-	4	9	42	55	
	75	-	-	-	-	4	10	47	61	
	80	-	-	-	-	5	10	53	68	
	85	-	-	-	-	5	11	59	75	
	90	-	-	-	-	6	15	62	83	
	95	-	-	-	-	6	18	68	92	
	100	-	-	-	-	7	21	73	101	
	110	-	-	-	-	8	26	87	121	
	120	-	-	-	-	8	33	101	142	
100	5	-	-	-	-	-	-	-	-	A
	10	-	-	-	-	-	-	-	-	B
	12	-	-	-	-	-	-	-	-	C
	15	-	-	-	-	-	-	5	5	D
	20	-	-	-	-	-	-	9	9	E
	25	-	-	-	-	-	3	10	13	F
	30	-	-	-	-	-	6	10	16	G
	35	-	-	-	-	-	8	11	19	H
	40	-	-	-	-	-	9	18	27	I
	45	-	-	-	-	3	8	25	36	J
	50	-	-	-	-	4	9	30	43	K
	55	-	-	-	-	5	9	37	51	L
	60	-	-	-	-	6	9	43	58	
	65	-	-	-	-	7	10	48	65	
	70	-	-	-	-	8	10	55	73	
	75	-	-	-	-	8	15	59	82	
	80	-	-	-	-	9	18	65	92	
	85	-	-	-	2	8	22	71	103	
	90	-	-	-	2	8	25	79	114	
	95	-	-	-	3	8	29	87	127	
	100	-	-	-	3	9	32	95	139	
	105	-	-	-	4	8	36	104	152	
	110	-	-	-	4	9	39	112	164	

DCIEM 1983 AIR DIVING TABLE 1 (FEET)
STANDARD AIR

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)							Decom. Time (min)	Repet. Dive Group
		70	60	50	40	30	20	10		
110	5	-	-	-	-	-	-	-	-	A
	11	-	-	-	-	-	-	-	-	C
	15	-	-	-	-	-	-	7	7	D
	20	-	-	-	-	-	3	9	12	F
	25	-	-	-	-	-	6	10	16	G
	30	-	-	-	-	-	9	11	20	H
	35	-	-	-	-	4	7	19	30	I
	40	-	-	-	-	5	8	26	39	J
	45	-	-	-	-	6	9	33	48	K
	50	-	-	-	-	8	9	39	56	M
	55	-	-	-	-	9	9	46	64	N
	60	-	-	-	3	7	11	53	74	
	65	-	-	-	3	8	16	58	85	
	70	-	-	-	4	8	20	64	96	
	75	-	-	-	5	8	23	73	109	
	80	-	-	-	5	8	28	81	122	
	85	-	-	-	6	8	32	91	137	
	90	-	-	-	6	9	35	101	151	
	95	-	-	-	7	9	40	111	167	
	100	-	-	-	7	10	44	120	181	
	105	-	-	-	8	13	46	129	196	
	110	-	-	-	8	16	50	136	210	
120	5	-	-	-	-	-	-	-	-	A
	9	-	-	-	-	-	-	-	-	B
	10	-	-	-	-	-	-	3	3	C
	15	-	-	-	-	-	-	10	10	D
	20	-	-	-	-	-	6	9	15	F
	25	-	-	-	-	-	9	11	20	G
	30	-	-	-	-	5	7	17	29	I
	35	-	-	-	-	6	9	25	40	J
	40	-	-	-	-	8	9	33	50	K
	45	-	-	-	3	7	9	41	60	M
	50	-	-	-	4	7	10	49	70	N
	55	-	-	-	5	7	15	54	81	
	60	-	-	-	6	8	19	61	94	
	65	-	-	-	7	8	23	70	108	
	70	-	-	-	7	9	27	80	123	
	75	-	-	2	6	9	32	91	140	
	80	-	-	3	6	9	37	103	158	
	85	-	-	3	7	10	41	114	175	
	90	-	-	3	7	14	44	124	192	
	95	-	-	4	7	16	49	134	210	
	100	-	-	4	7	20	53	142	226	

DCIEM 1983 AIR DIVING TABLE 1 (FEET)
STANDARD AIR

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)							Decom. Time (min)	Repet. Dive Group
		70	60	50	40	30	20	10		
130	5	-	-	-	-	-	-	-	-	A
	8	-	-	-	-	-	-	-	-	B
	10	-	-	-	-	-	-	5	5	C
	15	-	-	-	-	-	4	9	13	E
	20	-	-	-	-	-	8	10	18	G
	25	-	-	-	-	5	7	12	24	H
	30	-	-	-	-	7	8	23	38	J
	35	-	-	-	3	6	9	32	50	K
	40	-	-	-	5	6	10	40	61	M
	45	-	-	-	6	7	10	50	73	N
	50	-	-	-	7	8	16	55	86	
	55	-	-	2	6	8	21	64	101	
	60	-	-	3	6	8	26	75	118	
	65	-	-	4	6	9	31	86	136	
	70	-	-	5	6	9	36	100	156	
	75	-	-	5	7	11	40	113	176	
	80	-	-	6	7	15	44	125	197	
	85	-	-	6	7	18	49	135	215	
	90	-	-	7	7	22	54	144	234	
140	7	-	-	-	-	-	-	-	-	B
	10	-	-	-	-	-	-	7	7	D
	15	-	-	-	-	-	6	9	15	F
	20	-	-	-	-	4	7	11	22	G
	25	-	-	-	-	7	8	19	34	I
	30	-	-	-	4	6	9	29	48	K
	35	-	-	-	6	6	10	39	61	L
	40	-	-	-	7	7	10	49	73	N
	45	-	-	3	6	7	17	56	89	O
	50	-	-	4	6	8	22	65	105	
	55	-	-	5	6	9	27	78	125	
	60	-	-	6	6	9	33	91	145	
	65	-	-	7	6	11	38	106	168	
	70	-	2	5	7	15	42	120	191	
	75	-	3	5	8	18	47	133	214	
	80	-	3	6	8	21	54	143	235	
	85	-	4	6	8	25	61	151	255	
	90	-	4	6	8	30	68	157	273	

DCIEM 1983 AIR DIVING TABLE 1 (FEET)
STANDARD AIR

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)							Decom. Time (min)	Repet. Dive Group
		70	60	50	40	30	20	10		
150	7	-	-	-	-	-	-	-	-	B
	10	-	-	-	-	-	-	9	9	D
	15	-	-	-	-	-	8	10	18	F
	20	-	-	-	-	6	8	11	25	H
	25	-	-	-	4	6	8	25	43	J
	30	-	-	-	6	7	9	35	57	K
	35	-	-	3	5	7	10	46	71	M
	40	-	-	4	6	8	16	54	88	O
	45	-	-	6	6	8	22	65	107	
	50	-	-	7	6	9	28	78	128	
	55	-	3	5	6	10	34	94	152	
	60	-	4	5	7	13	39	110	178	
	65	-	4	6	7	17	44	125	203	
	70	-	5	6	7	21	50	139	228	
	75	-	6	5	8	25	58	148	250	
	80	-	6	6	8	29	67	155	271	
160	6	-	-	-	-	-	-	-	-	B
	10	-	-	-	-	-	3	9	12	D
	15	-	-	-	-	4	7	10	21	G
	20	-	-	-	3	5	8	16	32	H
	25	-	-	-	6	6	9	30	51	K
	30	-	-	4	5	6	10	42	67	M
	35	-	-	5	6	7	14	52	84	N
	40	-	-	7	6	8	21	62	104	
	45	-	3	5	6	9	28	76	127	
	50	-	4	5	7	9	35	93	153	
	55	-	5	6	7	14	39	112	183	
	60	-	6	6	7	18	45	129	211	
	65	3	4	6	8	22	53	142	238	
	70	3	5	6	8	27	62	152	263	
170	5	-	-	-	-	-	-	-	-	B
	10	-	-	-	-	-	5	9	14	D
	15	-	-	-	-	6	7	10	23	G
	20	-	-	-	5	6	8	22	41	I
	25	-	-	3	5	6	10	35	59	K
	30	-	-	6	5	7	11	48	77	M
	35	-	3	4	6	8	19	58	98	O
	40	-	4	5	6	9	26	72	122	
	45	-	6	5	6	10	34	91	152	
	50	3	4	5	7	14	39	111	183	
	55	3	5	5	8	19	45	129	214	
	60	4	5	6	8	23	54	144	244	
	65	5	5	6	8	29	64	154	271	
	70	5	5	7	12	31	76	160	296	

DCIEM 1983 AIR DIVING TABLE 1 (FEET)
STANDARD AIR

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)								Decom. Time (min)	Repet. Dive Group
		80	70	60	50	40	30	20	10		
180	5	-	-	-	-	-	-	-	-	-	B
	10	-	-	-	-	-	-	7	9	16	E
	15	-	-	-	-	-	8	7	11	26	H
	20	-	-	-	-	7	6	8	27	48	J
	25	-	-	-	5	5	7	10	40	67	M
	30	-	-	3	5	5	8	15	53	89	O
	35	-	-	5	5	6	8	24	66	114	
	40	-	3	4	5	6	9	32	85	144	
	45	-	4	4	5	7	14	38	107	179	
	50	-	5	4	6	7	19	45	127	213	
	55	-	5	5	6	8	24	53	144	245	
	60	3	3	5	7	9	29	65	155	276	
190	5	-	-	-	-	-	-	-	-	-	
	10	-	-	-	-	-	-	8	10	18	
	15	-	-	-	-	4	5	8	13	30	
	20	-	-	-	4	5	6	9	31	55	
	25	-	-	3	4	5	7	11	46	76	
	30	-	-	5	5	5	8	20	58	101	
	35	-	3	4	5	6	9	29	76	132	
	40	-	5	4	5	7	12	36	100	169	
	45	-	6	4	6	7	18	43	123	207	
	50	3	4	4	6	8	24	52	141	242	
	55	4	4	5	6	10	28	65	154	276	
200	5	-	-	-	-	-	-	-	4	4	
	10	-	-	-	-	-	4	6	10	20	
	15	-	-	-	-	6	5	8	18	37	
	20	-	-	-	6	4	7	9	36	62	
	25	-	-	5	4	5	8	14	51	87	
	30	-	3	4	5	6	8	24	67	117	
	35	-	5	4	5	7	9	34	89	153	
	40	3	3	5	5	8	16	40	115	195	
	45	4	4	4	6	8	22	49	137	234	
	50	5	4	5	6	10	27	62	153	272	

DCIEM 1983 AIR DIVING TABLE 1 (FEET)
STANDARD AIR

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)										Decom. Time (min)
		100	90	80	70	60	50	40	30	20	10	
210	5	-	-	-	-	-	-	-	-	-	6	6
	10	-	-	-	-	-	-	-	5	7	10	22
	15	-	-	-	-	-	-	7	6	8	22	43
	20	-	-	-	-	4	3	5	7	10	40	69
	25	-	-	-	-	6	5	5	8	18	55	97
	30	-	-	-	5	4	5	6	9	29	76	134
	35	-	-	3	4	4	5	7	14	36	103	176
	40	-	-	5	3	5	6	8	19	46	130	222
	45	-	-	6	4	4	7	8	27	57	149	262
	50	-	3	4	4	5	7	13	31	74	160	301
220	5	-	-	-	-	-	-	-	-	-	7	7
	10	-	-	-	-	-	-	-	7	7	10	24
	15	-	-	-	-	-	5	4	6	8	27	50
	20	-	-	-	-	5	4	5	7	10	46	77
	25	-	-	-	4	4	4	6	9	22	61	110
	30	-	-	3	4	4	5	7	9	33	87	152
	35	-	-	5	3	5	5	8	17	40	117	200
	40	-	3	3	4	5	6	8	24	52	142	247
230	5	-	-	-	-	-	-	-	-	-	8	8
	10	-	-	-	-	-	-	-	8	7	11	26
	15	-	-	-	-	-	6	4	7	9	30	56
	20	-	-	-	-	6	4	6	7	14	48	85
	25	-	-	-	6	4	4	7	8	26	69	124
	30	-	-	5	3	4	6	7	12	36	100	173
	35	-	4	3	3	5	6	8	20	46	131	226
	40	-	5	3	4	5	6	10	27	61	151	272
240	5	-	-	-	-	-	-	-	-	-	9	9
	10	-	-	-	-	-	-	5	5	7	11	28
	15	-	-	-	-	-	7	5	6	9	34	61
	20	-	-	-	5	3	4	6	[illegible]	17	53	96
	25	-	-	4	3	4	5	7	9	29	78	139
	30	-	4	2	4	4	6	7	16	39	113	195
	35	-	5	3	4	5	6	8	24	52	142	249
	40	4	2	4	4	5	7	13	30	71	159	299

APPENDIX IA

DCIEM 1983 AIR DIVING TABLE 1S

"SHORT STANDARD AIR"

DCIEM 1983 AIR DIVING TABLE 18 (FEET)
SHORT STANDARD AIR

Depth (fsw)	No Decompression Bottom Times (min)			Decompression Required Bottom Times (min)			
30	60 C 90 D	120 F 180 H	380				
40	60 D	120 H	175 L	185	190	199	206
50	30 C	50 E	75 G	95 I	115 K	122 K	127 L
60	20 B	30 D	50 F	60 G	80 I	84 J	88 J
70	15 B	25 D	35 E	40 F	50 G	63 I	66 J
80	10 A	20 D	25 E	29 F	35 G	48 H	52 I
90	10 A	15 C	20 D	23 E	27 F	36 H	43 I
100	5 A	10 B	15 D	18 D	21 E	29 G	36 H
110	5 A	10 B	12 C	15 D	18 D	23 F	30 H
120		5 A	10 C	12 D	15 D	19 F	25 G
130		5 A	8 B	10 C	13 D	16 F	21 G
140		5 A	7 B	9 C	11 D	14 F	18 G
150			6 B	8 C	10 D	12 E	15 F
Decompression Time (minutes)			20 fsw	-	-	5	10
			10 fsw	5	10	10	10

INSTRUCTIONS

1. Descent and ascent rates at 60 fsw/min.
2. Bottom time includes descent time.
3. Decompression stop times include ascent time to that stop.
4. Letter after bottom time gives repetitive dive group.

APPENDIX II

DCIEM 1983 AIR DIVING TABLE

"IN-WATER O_2"

DCIEM 1983 AIR DIVING TABLE 2 (FEET)
IN-WATER OXYGEN DECOMPRESSION

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)						Decom. Time (min)	Repet. Dive Group
		Air					O_2		
		80	70	60	50	40	30		
50	130	-	-	-	-	-	12	13	J
	140	-	-	-	-	-	15	16	K
	160	-	-	-	-	-	20	21	
	180	-	-	-	-	-	25	26	
	200	-	-	-	-	-	29	30	
	220	-	-	-	-	-	33	34	
	240	-	-	-	-	-	36	37	
	260	-	-	-	-	-	40	41	
	280	-	-	-	-	-	43	44	
60	90	-	-	-	-	-	12	13	J
	100	-	-	-	-	-	17	18	J
	110	-	-	-	-	-	21	22	K
	120	-	-	-	-	-	24	25	K
	140	-	-	-	-	-	30	31	
	160	-	-	-	-	-	35	36	
	180	-	-	-	-	-	40	41	
	200	-	-	-	-	-	46	47	
	220	-	-	-	-	-	51	52	
	240	-	-	-	-	-	55	56	
70	70	-	-	-	-	-	15	16	I
	80	-	-	-	-	-	20	21	J
	90	-	-	-	-	-	25	26	K
	100	-	-	-	-	-	29	30	K
	110	-	-	-	-	-	32	33	
	120	-	-	-	-	-	36	37	
	130	-	-	-	-	-	39	40	
	140	-	-	-	-	-	43	44	
	150	-	-	-	-	-	46	47	
	160	-	-	-	-	-	50	51	
	170	-	-	-	-	-	53	54	
	180	-	-	-	-	-	56	57	
	190	-	-	-	-	-	60	61	
	200	-	-	-	-	-	63	64	

DCIEM 1983 AIR DIVING TABLE 2 (FEET)
IN-WATER OXYGEN DECOMPRESSION

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)						Decom. Time (min)	Repet. Dive Group
		Air					O_2		
		80	70	60	50	40	30		
80	50	-	-	-	-	-	10	11	H
	55	-	-	-	-	-	14	15	H
	60	-	-	-	-	-	19	20	I
	70	-	-	-	-	-	25	26	J
	80	-	-	-	-	-	30	31	K
	90	-	-	-	-	-	35	36	
	100	-	-	-	-	-	39	40	
	110	-	-	-	-	-	43	44	
	120	-	-	-	-	-	47	48	
	130	-	-	-	-	-	52	53	
	140	-	-	-	-	-	56	57	
	150	-	-	-	-	-	60	61	
	160	-	-	-	-	-	65	66	
90	40	-	-	-	-	-	11	12	G
	45	-	-	-	-	-	14	15	H
	50	-	-	-	-	-	20	21	H
	55	-	-	-	-	-	24	25	I
	60	-	-	-	-	-	27	28	J
	70	-	-	-	-	-	33	34	
	80	-	-	-	-	-	39	40	
	90	-	-	-	-	-	44	45	
	100	-	-	-	-	-	49	50	
	110	-	-	-	-	-	54	55	
	120	-	-	-	-	-	60	61	
100	30	-	-	-	-	-	10	11	F
	35	-	-	-	-	-	12	13	G
	40	-	-	-	-	-	17	18	H
	45	-	-	-	-	-	23	24	I
	50	-	-	-	-	-	27	28	I
	55	-	-	-	-	-	31	32	J
	60	-	-	-	-	-	35	36	
	70	-	-	-	-	-	41	42	
	80	-	-	-	-	-	47	48	
	90	-	-	-	-	2	52	55	
	100	-	-	-	-	3	58	62	
	110	-	-	-	-	4	64	69	

DCIEM 1983 AIR DIVING TABLE 2 (FEET)
IN-WATER OXYGEN DECOMPRESSION

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)						Decom. Time (min)	Repet. Dive Group
		Air					O_2		
		80	70	60	50	40	30		
110	25	-	-	-	-	-	11	12	F
	30	-	-	-	-	-	13	14	G
	35	-	-	-	-	-	18	19	H
	40	-	-	-	-	-	25	26	I
	45	-	-	-	-	-	30	31	J
	50	-	-	-	-	-	34	35	K
	55	-	-	-	-	-	38	39	K
	60	-	-	-	-	3	40	44	
	65	-	-	-	-	3	44	48	
	70	-	-	-	-	4	47	52	
	75	-	-	-	-	5	50	56	
	80	-	-	-	-	5	54	60	
	85	-	-	-	-	6	57	64	
	90	-	-	-	-	6	61	68	
	95	-	-	-	-	7	64	72	
	100	-	-	-	-	7	68	76	
	105	-	-	-	-	8	71	80	
	110	-	-	-	-	8	75	84	
120	20	-	-	-	-	-	10	11	F
	25	-	-	-	-	-	13	14	G
	30	-	-	-	-	-	17	18	H
	35	-	-	-	-	-	25	26	H
	40	-	-	-	-	-	31	32	I
	45	-	-	-	-	3	34	38	J
	50	-	-	-	-	4	38	43	K
	55	-	-	-	-	5	42	48	
	60	-	-	-	-	6	46	53	
	65	-	-	-	-	7	50	58	
	70	-	-	-	-	7	54	62	
	75	-	-	-	2	6	58	67	
	80	-	-	-	3	6	62	72	
	85	-	-	-	3	7	66	77	
	90	-	-	-	3	7	70	81	
	95	-	-	-	4	7	74	86	
	100	-	-	-	4	7	79	91	

DCIEM 1983 AIR DIVING TABLE 2 (FEET)
IN-WATER OXYGEN DECOMPRESSION

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)						Decom. Time (min)	Repet. Dive Group
		Air					O_2		
		80	70	60	50	40	30		
130	20	-	-	-	-	-	12	13	G
	25	-	-	-	-	-	15	16	G
	30	-	-	-	-	-	24	25	H
	35	-	-	-	-	3	29	33	I
	40	-	-	-	-	5	34	40	J
	45	-	-	-	-	6	39	46	L
	50	-	-	-	-	7	43	51	
	55	-	-	-	2	6	48	57	
	60	-	-	-	3	6	52	62	
	65	-	-	-	4	6	56	67	
	70	-	-	-	5	6	61	73	
	75	-	-	-	5	7	65	78	
	80	-	-	-	6	7	70	84	
	85	-	-	-	6	7	75	89	
	90	-	-	-	7	7	80	95	
140	15	-	-	-	-	-	10	11	D
	20	-	-	-	-	-	14	15	G
	25	-	-	-	-	-	20	21	H
	30	-	-	-	-	4	27	32	I
	35	-	-	-	-	6	33	40	J
	40	-	-	-	-	7	39	47	K
	45	-	-	-	3	6	44	54	M
	50	-	-	-	4	6	49	60	
	55	-	-	-	5	6	53	65	
	60	-	-	-	6	6	58	71	
	65	-	-	-	7	6	64	78	
	70	-	-	2	5	7	69	84	
	75	-	-	3	5	8	74	91	
	80	-	-	3	6	8	80	98	
	85	-	-	4	6	8	85	104	
	90	-	-	4	8	8	91	110	

DCIEM 1983 AIR DIVING TABLE 2 (FEET)
IN-WATER OXYGEN DECOMPRESSION

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)						Decom. Time (min)	Repet. Dive Group
		Air					O_2		
		80	70	60	50	40	30		
150	15	-	-	-	-	-	12	13	F
	20	-	-	-	-	-	16	17	G
	25	-	-	-	-	4	24	29	H
	30	-	-	-	-	6	31	38	I
	35	-	-	-	3	5	37	46	K
	40	-	-	-	4	6	43	54	M
	45	-	-	-	6	6	48	61	
	50	-	-	-	7	6	54	68	
	55	-	-	3	5	6	60	75	
	60	-	-	4	5	7	65	82	
	65	-	-	4	6	7	71	89	
	70	-	-	5	6	7	77	96	
	75	-	-	6	5	8	84	104	
	80	-	-	6	6	8	90	111	
160	15	-	-	-	-	-	14	15	F
	20	-	-	-	-	3	16	20	G
	25	-	-	-	-	6	28	35	I
	30	-	-	-	4	5	35	45	J
	35	-	-	-	5	6	41	53	L
	40	-	-	-	7	6	47	61	
	45	-	-	3	5	6	54	69	
	50	-	-	4	5	7	60	77	
	55	-	-	5	6	7	66	85	
	60	-	-	6	6	7	73	93	
	65	-	3	4	6	8	80	102	
	70	-	3	5	6	8	87	110	
170	15	-	-	-	-	-	15	16	G
	20	-	-	-	-	5	21	27	H
	25	-	-	-	3	5	31	40	J
	30	-	-	-	6	5	39	51	K
	35	-	-	3	4	6	46	60	M
	40	-	-	4	5	6	52	68	
	45	-	-	6	5	6	59	77	
	50	-	3	4	5	7	66	86	
	55	-	3	5	5	8	73	95	
	60	-	4	5	6	8	81	105	
	65	-	5	5	6	8	89	114	
	70	-	5	5	7	12	96	126	

DCIEM 1983 AIR DIVING TABLE 2 (FEET)
IN-WATER OXYGEN DECOMPRESSION

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)						Decom. Time (min)	Repet. Dive Group
		Air					O_2		
		80	70	60	50	40	30		
180	15	-	-	-	-	-	17	18	G
	20	-	-	-	-	7	25	33	H
	25	-	-	-	5	5	35	46	J
	30	-	-	3	5	5	42	56	M
	35	-	-	5	5	6	50	67	
	40	-	3	4	5	6	57	76	
	45	-	4	4	5	7	65	86	
	50	-	5	4	6	7	73	96	
	55	-	5	5	6	8	81	106	
	60	3	3	5	7	9	89	117	
190	10	-	-	-	-	-	12	13	
	15	-	-	-	-	4	15	20	
	20	-	-	-	4	5	29	39	
	25	-	-	3	4	5	38	51	
	30	-	-	5	5	5	46	62	
	35	-	3	4	5	6	54	73	
	40	-	5	4	5	7	62	84	
	45	-	6	4	6	7	71	95	
	50	3	4	4	6	8	80	106	
	55	4	4	5	6	10	89	119	
200	10	-	-	-	-	-	13	14	
	15	-	-	-	-	6	18	25	
	20	-	-	-	6	4	32	43	
	25	-	-	5	4	5	41	56	
	30	-	3	4	5	6	50	69	
	35	-	5	4	5	7	58	80	
	40	3	3	5	5	8	67	92	
	45	4	4	4	6	8	77	104	
	50	5	4	5	6	10	87	118	

DCIEM 1983 AIR DIVING TABLE 3 (FEET)
IN-WATER OXYGEN DECOMPRESSION

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)								Decom. Time (min)
		Air							O_2	
		100	90	80	70	60	50	40	30	
210	10	-	-	-	-	-	-	-	15	16
	15	-	-	-	-	-	-	7	22	30
	20	-	-	-	-	4	3	5	35	48
	25	-	-	-	-	6	5	5	45	62
	30	-	-	-	5	4	5	6	54	75
	35	-	-	3	4	4	5	7	63	87
	40	-	-	5	3	5	6	8	73	101
	45	-	-	6	4	4	7	8	84	114
	50	-	3	4	4	5	7	13	95	132
220	10	-	-	-	-	-	-	-	16	17
	15	-	-	-	-	-	5	4	25	35
	20	-	-	-	-	5	4	5	38	53
	25	-	-	-	4	4	4	6	48	67
	30	-	-	3	4	4	5	7	58	82
	35	-	-	5	3	5	5	8	68	95
	40	-	3	3	4	5	6	8	80	110
	45	-	4	3	4	6	6	12	91	127
230	10	-	-	-	-	-	-	-	17	18
	15	-	-	-	-	-	6	4	28	39
	20	-	-	-	-	5	4	6	40	57
	25	-	-	-	6	4	4	7	51	73
	30	-	-	5	3	4	6	7	62	88
	35	-	4	3	3	5	6	8	74	104
	40	-	5	3	4	5	6	10	86	120
240	10	-	-	-	-	-	-	5	14	20
	15	-	-	-	-	-	7	5	30	43
	20	-	-	-	5	3	4	6	43	62
	25	-	-	4	3	4	5	7	55	79
	30	-	4	2	4	4	6	7	67	95
	35	-	5	3	4	5	6	8	80	112
	40	4	2	4	4	5	7	13	93	133

APPENDIX IIA

DCIEM 1983 AIR DIVING TABLE

"SHORT IN-WATER O_2"

DCIEM 1983 AIR DIVING TABLE 28 (FEET)
SHORT IN-WATER O_2 DECOMPRESSION

Depth (fsw)	No Decompression Bottom Times (min)			Decompression Required Bottom Times (min)			
50	30 C	50 E	75 G	115 J	125 J	140 K	160
60	15 B	30 D	50 F	75 H	85 I	95 J	110 K
70	15 B	25 D	35 F	45 F	65 H	72 I	82 J
80	10 A	20 D	25 E	30 E	50 H	57 H	64 I
90	10 A	15 C	20 D	25 D	40 G	46 H	52 I
100	5 A	10 B	15 D	20 D	33 G	39 H	43 I
110	5 A	10 B	12 C	17 D	28 G	34 H	37 H
120		5 A	10 C	14 D	23 G	30 H	32 H
130		5 A	8 B	13 D	20 G	26 G	29 H
140		5 A	7 B	11 D	17 F	24 G	26 H
150			6 B	10 D	15 F	21 G	23 H
160			6 B	9 C	14 F	19 G	21 H
170			5 B	8 C	12 E	18 G	19 H
180			5 B	7 C	11 E	16 G	18 G
Decompression Time (min) O_2 at 30 fsw				5	10	15	20

INSTRUCTIONS

1. Descent and ascent rates at 60 fsw/min.
2. Bottom time includes descent time.
3. Decompression times are O_2 times only, and does not include the ascent time to 30 fsw.
4. Letter after bottom time gives repetitive dive group.

APPENDIX III

DCIEM 1983 AIR DIVING TABLE

"SURD O_2"

DCIEM 1983 AIR DIVING TABLE 3 (FEET)
SURFACE DECOMPRESSION WITH OXYGEN

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)								Decom. Time (min)	Repet. Dive Group
		In-Water Stops						Surface Interval	Chamber O_2		
		Air									
		80	70	60	50	40	30		40		
60	80	-	-	-	-	-	-	Time from leaving the 30 fsw stop (or the bottom, if no in-water stop is required) to reaching the 40 fsw Chamber stop must not exceed 7 minutes.	16	25	H
	90	-	-	-	-	-	-		20	29	I
	100	-	-	-	-	-	-		24	33	J
	110	-	-	-	-	-	-		28	37	K
	120	-	-	-	-	-	-		30	39	K
	130	-	-	-	-	-	-		33•	47	
	140	-	-	-	-	-	-		38•	52	
	150	-	-	-	-	-	-		43•	57	
	160	-	-	-	-	-	-		47•	61	
	170	-	-	-	-	-	-		50•	64	
	180	-	-	-	-	-	-		54•	68	
	190	-	-	-	-	-	-		57•	71	
	200	-	-	-	-	-	-		60••	79	
	210	-	-	-	-	-	-		64••	83	
	220	-	-	-	-	-	-		70••	89	
	230	-	-	-	-	-	-		74••	93	
	240	-	-	-	-	-	-		77••	96	
70	60	-	-	-	-	-	-		15	24	H
	70	-	-	-	-	-	-		21	30	I
	80	-	-	-	-	-	-		26	35	J
	90	-	-	-	-	-	-		30	39	K
	100	-	-	-	-	-	-		34•	48	K
	110	-	-	-	-	-	-		40•	54	
	120	-	-	-	-	-	-		46•	60	
	130	-	-	-	-	-	-		50•	64	
	140	-	-	-	-	-	-		55•	69	
	150	-	-	-	-	-	-		60•	74	
	160	-	-	-	-	-	-		64••	83	
	170	-	-	-	-	-	-		71••	90	
	180	-	-	-	-	-	-		76••	95	
	190	-	-	-	-	-	1		81••	101	
	200	-	-	-	-	-	2		85••	106	

Note: asterisk (•) indicates number of 5 min air breaks required

DCIEM 1983 AIR DIVING TABLE 3 (FEET)
SURFACE DECOMPRESSION WITH OXYGEN

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)								Decom. Time (min)	Repet. Dive Group
		In-Water Stops						Surface Interval	Chamber O_2		
		Air									
		80	70	60	50	40	30		40		
80	50	-	-	-	-	-	-	Time from leaving the 30 fsw stop (or the bottom, if no in-water stop is required) to reaching the 40 fsw Chamber stop must not exceed 7 minutes.	17	26	H
	55	-	-	-	-	-	-		21	30	H
	60	-	-	-	-	-	-		24	33	I
	70	-	-	-	-	-	-		30	39	J
	80	-	-	-	-	-	-		35*	49	K
	90	-	-	-	-	-	1		41*	56	
	100	-	-	-	-	-	2		47*	63	
	110	-	-	-	-	-	3		53*	70	
	120	-	-	-	-	-	3		59*	76	
	130	-	-	-	-	-	4		63**	86	
	140	-	-	-	-	-	5		72**	96	
	150	-	-	-	-	-	5		79**	103	
	160	-	-	-	-	-	6		84**	109	
90	40	-	-	-	-	-	-		16	25	G
	45	-	-	-	-	-	-		21	30	H
	50	-	-	-	-	-	-		25	34	H
	55	-	-	-	-	-	1		28	38	I
	60	-	-	-	-	-	2		30*	46	J
	70	-	-	-	-	-	4		37*	55	
	80	-	-	-	-	-	5		45*	64	
	90	-	-	-	-	-	6		52*	72	
	100	-	-	-	-	-	7		58*	79	
	110	-	-	-	-	-	8		65**	92	
	120	-	-	-	-	-	8		75**	102	
100	35	-	-	-	-	-	-		17	26	G
	40	-	-	-	-	-	2		22	33	H
	45	-	-	-	-	-	3		27	39	I
	50	-	-	-	-	-	4		30	43	I
	55	-	-	-	-	-	5		31*	50	J
	60	-	-	-	-	-	6		37*	57	
	70	-	-	-	-	-	8		46*	68	
	80	-	-	-	-	-	9		54*	77	
	90	-	-	-	-	2	8		60*	84	
	100	-	-	-	-	3	9		72**	103	
	110	-	-	-	-	4	9		81**	113	

Note: asterisk (*) indicates number of 5 min air breaks required

DCIEM 1983 AIR DIVING TABLE 3 (FEET)
SURFACE DECOMPRESSION WITH OXYGEN

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)						Surface Interval	Chamber O_2	Decom. Time (min)	Repet. Dive Group
		In-Water Stops									
		Air									
		80	70	60	50	40	30		40		
110	30	-	-	-	-	-	2	Time from leaving the 30 fsw stop to reaching the 40 fsw Chamber stop must not exceed 7 minutes.	16	27	G
	35	-	-	-	-	-	4		22	35	H
	40	-	-	-	-	-	5		27	41	I
	45	-	-	-	-	-	6		30*	50	J
	50	-	-	-	-	-	8		34*	56	K
	55	-	-	-	-	-	9		40*	63	K
	60	-	-	-	-	3	7		45*	69	
	65	-	-	-	-	3	8		50*	75	
	70	-	-	-	-	4	8		54*	80	
	75	-	-	-	-	5	8		59*	86	
	80	-	-	-	-	5	8		61**	93	
	85	-	-	-	-	6	8		70**	103	
	90	-	-	-	-	6	9		78**	110	
	95	-	-	-	-	7	9		81**	116	
	100	-	-	-	-	7	10		86**	122	
	105	-	-	-	-	8	13		90**	130	
	110	-	-	-	-	8	16		95***	143	
120	25	-	-	-	-	-	2		13	24	G
	30	-	-	-	-	-	5		21	35	G
	35	-	-	-	-	-	6		27	42	H
	40	-	-	-	-	-	8		30*	52	I
	45	-	-	-	-	3	7		36*	60	J
	50	-	-	-	-	4	7		42*	67	K
	55	-	-	-	-	5	7		48*	74	
	60	-	-	-	-	6	8		53*	81	
	65	-	-	-	-	7	8		58*	87	
	70	-	-	-	-	7	9		60**	95	
	75	-	-	-	2	6	9		70**	106	
	80	-	-	-	3	6	9		77**	114	
	85	-	-	-	3	7	10		83**	122	
	90	-	-	-	3	7	14		87**	130	
	95	-	-	-	4	7	16		90**	138	
	100	-	-	-	4	7	20		100***	155	

Note: asterisk (*) indicates number of 5 min air breaks required

DCIEM 1983 AIR DIVING TABLE 3 (FEET)
SURFACE DECOMPRESSION WITH OXYGEN

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)								Decom. Time (min)	Repet. Dive Group
		In-Water Stops						Surface Interval	Chamber		
		Air							O_2		
		80	70	60	50	40	30		40		
130	25	-	-	-	-	-	5	Time from leaving the 30 fsw stop to reaching the 40 fsw Chamber stop must not exceed 7 minutes.	18	32	G
	30	-	-	-	-	-	7		26	42	H
	35	-	-	-	-	3	6		30•	53	I
	40	-	-	-	-	5	6		38•	61	J
	45	-	-	-	-	6	7		43•	70	K
	50	-	-	-	-	7	8		49•	78	
	55	-	-	-	2	6	8		55•	85	
	60	-	-	-	3	6	8		60••	96	
	65	-	-	-	4	6	9		68••	106	
	70	-	-	-	5	6	9		76••	115	
	75	-	-	-	5	7	11		82••	124	
	80	-	-	-	6	7	15		87••	134	
	85	-	-	-	6	7	18		90•••	145	
	90	-	-	-	7	7	22		102•••	162	
140	20	-	-	-	-	-	4		12	25	G
	25	-	-	-	-	-	7		23	39	H
	30	-	-	-	-	4	6		30	49	I
	35	-	-	-	-	6	6		34•	60	J
	40	-	-	-	-	7	7		42•	70	K
	45	-	-	-	3	6	7		49•	79	M
	50	-	-	-	4	6	8		56•	88	
	55	-	-	-	5	6	9		60••	99	
	60	-	-	-	6	6	9		71••	111	
	65	-	-	-	7	6	11		79••	122	
	70	-	-	2	5	7	15		85••	133	
	75	-	-	3	5	8	18		90••	143	
	80	-	-	3	6	8	21		101•••	163	
	85	-	-	4	6	8	25		108•••	175	
	90	-	-	4	6	8	30		113•••	185	

Note: asterisk (•) indicates number of 5 min air breaks required

DCIEM 1983 AIR DIVING TABLE 3 (FEET)
SURFACE DECOMPRESSION WITH OXYGEN

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)								Decom. Time (min)	Repet. Dive Group
		In-Water Stops						Surface Interval	Chamber O_2		
		Air									
		80	70	60	50	40	30		40		
150	20	-	-	-	-	-	6	Time from leaving the 30 fsw stop to reaching the 40 fsw Chamber stop must not exceed 7 minutes.	17	32	G
	25	-	-	-	-	4	6		26	45	H
	30	-	-	-	-	6	7		30•	57	I
	35	-	-	-	3	5	7		40•	69	K
	40	-	-	-	4	6	8		48•	80	M
	45	-	-	-	6	6	8		55•	89	
	50	-	-	-	7	6	9		60••	101	
	55	-	-	3	5	6	10		73••	116	
	60	-	-	4	5	7	13		81••	129	
	65	-	-	4	6	7	17		87••	140	
	70	-	-	5	6	7	21		97•••	160	
	75	-	-	6	5	8	25		106•••	174	
	80	-	-	6	6	8	29		112•••	185	
160	20	-	-	-	-	3	5		21	38	G
	25	-	-	-	-	6	6		30	51	I
	30	-	-	-	4	5	6		37•	66	J
	35	-	-	-	5	6	7		46•	78	L
	40	-	-	-	7	6	8		54•	89	
	45	-	-	3	5	6	9		60•	97	
	50	-	-	4	5	7	9		73••	117	
	55	-	-	5	6	7	14		81••	132	
	60	-	-	6	6	7	18		89••	145	
	65	-	3	4	6	8	22		101•••	168	
	70	-	3	5	6	8	27		109•••	182	
170	15	-	-	-	-	-	6		11	26	G
	20	-	-	-	-	5	6		25	45	H
	25	-	-	-	3	5	6		30•	58	J
	30	-	-	-	6	5	7		42•	74	K
	35	-	-	3	4	6	8		51•	86	M
	40	-	-	4	5	6	9		60•	98	
	45	-	-	6	5	6	10		71••	117	
	50	-	3	4	5	7	14		81••	133	
	55	-	3	5	5	8	19		89••	148	
	60	-	4	5	6	8	23		102•••	172	
	65	-	5	5	6	8	29		111•••	188	
	70	-	5	5	7	12	31		118•••	202	

Note: asterisk (•) indicates number of 5 min air breaks required

DCIEM 1983 AIR DIVING TABLE 3 (FEET)
SURFACE DECOMPRESSION WITH OXYGEN

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)								Decom. Time (min)	Repet. Dive Group
		In-Water Stops						Surface Interval	Chamber		
		Air							O_2		
		80	70	60	50	40	30		40		
180	15	-	-	-	-	-	8	Time from leaving the 30 fsw stop to reaching the 40 fsw Chamber stop must not exceed 7 minutes.	15	32	G
	20	-	-	-	-	7	6		28	50	H
	25	-	-	-	5	5	7		36•	67	J
	30	-	-	3	5	5	8		47•	82	M
	35	-	-	5	5	6	8		57•	95	
	40	-	3	4	5	6	9		68••	114	
	45	-	4	4	5	7	14		79••	132	
	50	-	5	4	6	7	19		88••	148	
	55	-	5	5	6	8	24		102•••	174	
	60	3	3	5	7	9	29		111•••	191	
190	15	-	-	-	-	4	5		19	37	
	20	-	-	-	4	5	6		30	54	
	25	-	-	3	4	5	7		41•	74	
	30	-	-	5	5	5	8		52•	89	
	35	-	3	4	5	6	9		60•	101	
	40	-	5	4	5	7	12		76••	128	
	45	-	6	4	6	7	18		86••	146	
	50	3	4	4	6	8	24		100•••	173	
	55	4	4	5	6	10	28		111•••	192	
200	15	-	-	-	-	6	5		22	42	
	20	-	-	-	6	4	7		31•	62	
	25	-	-	5	4	5	8		45•	81	
	30	-	3	4	5	6	8		57•	97	
	35	-	5	4	5	7	9		70••	119	
	40	3	3	5	5	8	16		83••	142	
	45	4	4	4	6	8	22		95•••	167	
	50	5	4	5	6	10	27		109•••	190	

Note: asterisk (•) indicates number of 5 min air breaks required

DCIEM 1983 AIR DIVING TABLE 3 (FEET)
SURFACE DECOMPRESSION WITH OXYGEN

Depth (fsw)	Bottom Time (min)	Stop Times (min) at Different Depths (fsw)										Decom. Time (min)
		In-Water Stops								Surface Interval	Chamber O_2	
		Air										
		100	90	80	70	60	50	40	30		40	
210	15	-	-	-	-	-	-	7	6	Time from leaving the 30 fsw stop to reaching the 40 fsw Chamber stop must not exceed 7 minutes.	25	47
	20	-	-	-	-	4	3	5	7		38•	69
	25	-	-	-	-	6	5	5	8		50•	88
	30	-	-	-	5	4	5	6	9		60•	103
	35	-	-	3	4	4	5	7	14		77••	133
	40	-	-	5	3	5	6	8	19		90••	155
	45	-	-	6	4	4	7	8	27		106•••	186
	50	-	3	4	4	5	7	13	31		117•••	208
220	15	-	-	-	-	-	5	4	6		28	52
	20	-	-	-	-	5	4	5	7		40•	75
	25	-	-	-	4	4	4	6	9		54•	95
	30	-	-	3	4	4	5	7	9		69••	120
	35	-	-	5	3	5	5	8	17		83••	145
	40	-	3	3	4	5	6	8	24		100•••	177
	45	-	4	3	4	6	6	12	29		113•••	201
230	15	-	-	-	-	-	6	4	7		30	56
	20	-	-	-	-	6	4	6	7		44•	81
	25	-	-	-	6	4	4	7	8		59•	102
	30	-	-	5	3	4	6	7	12		76••	132
	35	-	4	3	3	5	6	8	20		90••	158
	40	-	5	3	4	5	6	10	27		108•••	192
240	15	-	-	-	-	-	7	5	6		30•	62
	20	-	-	-	5	3	4	6	8		48•	88
	25	-	-	4	3	4	5	7	9		60••	111
	30	-	4	2	4	4	6	7	16		82••	144
	35	-	5	3	4	5	6	8	24		100•••	179
	40	4	2	4	4	5	7	13	30		115•••	208

Note: asterisk (•) indicates number of 5 min air breaks required

APPENDIX IV

DCIEM 1983 AIR DIVING TABLE

"REPETITIVE FACTORS"

DCIEM 1983 AIR DIVING TABLE 4
REPETITIVE DIVE FACTORS

Repetitive Dive Group First Dive	Surface Intervals (hr:min)								
	0:30 →0:59	1:00 →1:29	1:30 →1:59	2:00 →2:59	3:00 →3:59	4:00 →5:59	6:00 →8:59	9:00 →11:59	12:00 →18:00
A	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0
B	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.0
C	1.4	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.0
D	1.5	1.4	1.3	1.3	1.2	1.2	1.1	1.1	1.0
E	1.6	1.5	1.4	1.3	1.3	1.2	1.2	1.1	1.1
F	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1.1
G	1.9	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1
H	-	1.9	1.7	1.6	1.5	1.4	1.3	1.1	1.1
I	-	2.0	1.8	1.7	1.5	1.4	1.3	1.1	1.1
J	-	-	1.9	1.8	1.6	1.5	1.3	1.2	1.1
K	-	-	2.0	1.9	1.7	1.5	1.3	1.2	1.1
L	-	-	-	2.0	1.7	1.6	1.4	1.2	1.1
M	-	-	-	-	1.8	1.6	1.4	1.2	1.1
N	-	-	-	-	1.9	1.7	1.4	1.2	1.1
O	-	-	-	-	2.0	1.7	1.4	1.2	1.1

INSTRUCTIONS

1. Determine the **First Dive** Group from the table used.
2. Find the **Repetitive Factor (RF)** from this table under the appropriate **Surface Interval.**
3. Multiply the **Bottom Time** of the **Second Dive** by this **RF** to obtain the **Effective Bottom Time (EBT).**
4. Decompress for the **Depth** and **EBT** of the **Second Dive.**

APPENDIX V

DCIEM 1983 AIR DIVING TABLE

"DEPTH CORRECTIONS"

FOR DIVING AT ALTITUDE

DCIEM 1983 AIR DIVING TABLE 5 (FEET)
DEPTH CORRECTION FOR DIVING AT ALTITUDE

Actual Depth (fsw)	Depth Correction (fsw) at Altitude (feet)								
	300 →1000	1000 →2000	2000 →3000	3000 →4000	4000 →5000	5000 →6000	6000 →7000	7000 →8000	8000 →10000
30	+0	+10	+10	+10	+10	+10	+10	+20	+20
40	+0	+10	+10	+10	+10	+10	+20	+20	+20
50	+0	+10	+10	+10	+10	+20	+20	+20	+20
60	+0	+10	+10	+10	+20	+20	+20	+20	+30
70	+0	+10	+10	+10	+20	+20	+20	+30	+30
80	+0	+10	+10	+20	+20	+20	+30	+30	+40
90	+0	+10	+10	+20	+20	+20	+30	+30	+40
100	+0	+10	+10	+20	+20	+30	+30	+30	+40
110	+0	+10	+20	+20	+20	+30	+30	+40	+50
120	+0	+10	+20	+20	+30	+30	+30	+40	+50
130	+0	+10	+20	+20	+30	+30	+40	+40	+50
140	+0	+10	+20	+20	+30	+30	+40	+40	+60
150	+10	+10	+20	+20	+30	+40	+40	+50	+60
160	+10	+20	+20	+30	+30	+40	+40	+50	+60
170	+10	+20	+20	+30	+30	+40	+50	+50	+70
180	+10	+20	+20	+30	+40	+40	+50	+50	
190	+10	+20	+20	+30	+40	+40	+50		
200	+10	+20	+20	+30	+40	+40			
210	+10	+20	+20	+30					
220	+10	+20							
230	+10								

Sea Level Stop Depth (fsw)	Actual Stop Depth (fsw) at Altitude (feet)								
	300 →1000	1000 →2000	2000 →3000	3000 →4000	4000 →5000	5000 →6000	6000 →7000	7000 →8000	8000 →10000
10	10	10	10	9	9	9	8	8	8
20	20	20	19	18	18	17	16	16	15
30	30	29	28	27	26	25	24	24	23
40	40	39	38	36	35	34	32	31	30
50	50	49	47	45	44	42	40	39	38
60	59	58	56	54	52	50	48	47	45
70	69	68	66	63	61	59	56	54	52

DCIEM 1983

AIR DIVING TABLES

(METRES)

APPENDIX I

DCIEM 1983 AIR DIVING TABLE 1

"STANDARD AIR"

DCIEM 1983 AIR DIVING TABLE 1 (METRES)
STANDARD AIR

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)							Decom. Time (min)	Repet. Dive Group
		21	18	15	12	9	6	3		
9	30	-	-	-	-	-	-	-	-	A
	60	-	-	-	-	-	-	-	-	C
	90	-	-	-	-	-	-	-	-	D
	120	-	-	-	-	-	-	-	-	F
	150	-	-	-	-	-	-	-	-	G
	180	-	-	-	-	-	-	-	-	H
	400	-	-	-	-	-	-	-	-	
	405	-	-	-	-	-	-	5	5	
	420	-	-	-	-	-	-	10	10	
	450	-	-	-	-	-	-	15	15	
	480	-	-	-	-	-	-	20	20	
12	30	-	-	-	-	-	-	-	-	B
	60	-	-	-	-	-	-	-	-	D
	90	-	-	-	-	-	-	-	-	G
	120	-	-	-	-	-	-	-	-	H
	150	-	-	-	-	-	-	-	-	J
	170	-	-	-	-	-	-	-	-	K
	180	-	-	-	-	-	-	1	1	L
	190	-	-	-	-	-	-	2	2	
	195	-	-	-	-	-	-	7	7	
	200	-	-	-	-	-	-	10	10	
	210	-	-	-	-	-	-	15	15	
	220	-	-	-	-	-	-	19	19	
	240	-	-	-	-	-	-	26	26	
	270	-	-	-	-	-	-	35	35	
	300	-	-	-	-	-	-	44	44	
	330	-	-	-	-	-	-	53	53	
	360	-	-	-	-	-	-	62	62	

DCIEM 1983 AIR DIVING TABLE 1 (METRES)
STANDARD AIR

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)							Decom. Time (min)	Repet. Dive Group
		21	18	15	12	9	6	3		
15	20	-	-	-	-	-	-	-	-	A
	30	-	-	-	-	-	-	-	-	C
	40	-	-	-	-	-	-	-	-	D
	50	-	-	-	-	-	-	-	-	E
	63	-	-	-	-	-	-	-	-	F
	80	-	-	-	-	-	-	3	3	G
	100	-	-	-	-	-	-	5	5	I
	120	-	-	-	-	-	-	8	8	K
	125	-	-	-	-	-	-	13	13	K
	130	-	-	-	-	-	-	16	16	L
	140	-	-	-	-	-	-	21	21	M
	150	-	-	-	-	-	-	26	26	
	160	-	-	-	-	-	-	31	31	
	170	-	-	-	-	-	-	35	35	
	180	-	-	-	-	-	-	40	40	
	200	-	-	-	-	-	-	50	50	
	220	-	-	-	-	-	-	59	59	
	240	-	-	-	-	-	-	70	70	
	260	-	-	-	-	-	-	81	81	
	280	-	-	-	-	-	-	91	91	
18	10	-	-	-	-	-	-	-	-	A
	20	-	-	-	-	-	-	-	-	B
	30	-	-	-	-	-	-	-	-	D
	36	-	-	-	-	-	-	-	-	D
	40	-	-	-	-	-	-	3	3	E
	50	-	-	-	-	-	-	5	5	F
	60	-	-	-	-	-	-	7	7	G
	80	-	-	-	-	-	-	10	10	I
	90	-	-	-	-	-	-	16	16	J
	100	-	-	-	-	-	-	24	24	K
	110	-	-	-	-	-	-	30	30	L
	120	-	-	-	-	-	-	36	36	M
	130	-	-	-	-	-	2	40	42	
	140	-	-	-	-	-	2	46	48	
	150	-	-	-	-	-	3	52	55	
	160	-	-	-	-	-	3	59	62	
	170	-	-	-	-	-	4	65	69	
	180	-	-	-	-	-	4	73	77	
	190	-	-	-	-	-	5	80	85	
	200	-	-	-	-	-	7	87	94	
	210	-	-	-	-	-	13	91	104	
	220	-	-	-	-	-	17	97	114	
	230	-	-	-	-	-	21	103	124	
	240	-	-	-	-	-	24	109	133	

DCIEM 1983 AIR DIVING TABLE 1 (METRES)
STANDARD AIR

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)							Decom. Time (min)	Repet. Dive Group
		21	18	15	12	9	6	3		
21	10	-	-	-	-	-	-	-	-	A
	20	-	-	-	-	-	-	-	-	C
	25	-	-	-	-	-	-	-	-	D
	30	-	-	-	-	-	-	4	4	D
	40	-	-	-	-	-	-	7	7	F
	50	-	-	-	-	-	-	10	10	G
	60	-	-	-	-	-	-	12	12	H
	70	-	-	-	-	-	3	17	20	J
	80	-	-	-	-	-	4	25	29	K
	90	-	-	-	-	-	5	32	37	M
	100	-	-	-	-	-	6	39	45	N
	110	-	-	-	-	-	7	46	53	
	120	-	-	-	-	-	7	54	61	
	130	-	-	-	-	-	8	62	70	
	140	-	-	-	-	-	9	71	80	
	150	-	-	-	-	-	15	77	92	
	160	-	-	-	-	-	20	85	105	
	170	-	-	-	-	-	25	93	118	
	180	-	-	-	-	-	29	101	130	
	190	-	-	-	-	-	34	109	143	
	200	-	-	-	-	-	38	117	155	
24	10	-	-	-	-	-	-	-	-	A
	15	-	-	-	-	-	-	-	-	C
	19	-	-	-	-	-	-	-	-	D
	25	-	-	-	-	-	-	5	5	E
	30	-	-	-	-	-	-	8	8	F
	40	-	-	-	-	-	-	11	11	G
	50	-	-	-	-	-	4	11	15	H
	55	-	-	-	-	-	5	15	20	I
	60	-	-	-	-	-	6	21	27	J
	65	-	-	-	-	-	7	25	32	J
	70	-	-	-	-	-	7	30	37	K
	75	-	-	-	-	-	8	34	42	L
	80	-	-	-	-	-	9	37	46	M
	85	-	-	-	-	-	9	42	51	
	90	-	-	-	-	-	10	46	56	
	95	-	-	-	-	-	11	50	61	
	100	-	-	-	-	-	11	55	66	
	110	-	-	-	-	2	12	64	78	
	120	-	-	-	-	3	18	72	93	
	130	-	-	-	-	4	23	82	109	
	140	-	-	-	-	4	28	93	125	
	150	-	-	-	-	5	33	104	142	
	160	-	-	-	-	5	39	114	158	

DCIEM 1983 AIR DIVING TABLE 1 (METRES)
STANDARD AIR

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)							Decom. Time (min)	Repet. Dive Group
		21	18	15	12	9	6	3		
27	10	-	-	-	-	-	-	-	-	A
	15	-	-	-	-	-	-	-	-	C
	20	-	-	-	-	-	-	6	6	D
	30	-	-	-	-	-	2	9	11	F
	40	-	-	-	-	-	6	10	16	H
	45	-	-	-	-	-	7	14	21	I
	50	-	-	-	-	-	8	20	28	J
	55	-	-	-	-	-	9	26	35	K
	60	-	-	-	-	2	8	31	41	L
	65	-	-	-	-	3	8	36	47	
	70	-	-	-	-	3	9	40	52	
	75	-	-	-	-	4	9	46	59	
	80	-	-	-	-	4	10	51	65	
	85	-	-	-	-	5	10	56	71	
	90	-	-	-	-	5	14	60	79	
	95	-	-	-	-	6	17	64	87	
	100	-	-	-	-	6	20	70	96	
	110	-	-	-	-	7	28	82	115	
	120	-	-	-	-	8	31	95	134	
30	5	-	-	-	-	-	-	-	-	A
	10	-	-	-	-	-	-	-	-	B
	13	-	-	-	-	-	-	-	-	C
	15	-	-	-	-	-	-	4	4	D
	20	-	-	-	-	-	-	9	9	E
	25	-	-	-	-	-	3	9	12	F
	30	-	-	-	-	-	5	10	15	G
	35	-	-	-	-	-	7	11	18	H
	40	-	-	-	-	-	9	16	25	I
	45	-	-	-	-	3	8	23	34	J
	50	-	-	-	-	4	8	29	41	K
	55	-	-	-	-	5	9	34	48	L
	60	-	-	-	-	6	9	40	55	
	65	-	-	-	-	6	10	46	62	
	70	-	-	-	-	7	10	52	69	
	75	-	-	-	-	8	14	56	78	
	80	-	-	-	-	8	18	61	87	
	85	-	-	-	-	9	21	67	97	
	90	-	-	-	2	8	24	75	109	
	95	-	-	-	3	8	27	82	120	
	100	-	-	-	3	8	31	90	132	
	105	-	-	-	3	9	34	98	144	
	110	-	-	-	4	8	38	106	156	

DCIEM 1983 AIR DIVING TABLE 1 (METRES)
STANDARD AIR

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)							Decom. Time (min)	Repet. Dive Group
		21	18	15	12	9	6	3		
33	5	-	-	-	-	-	-	-	-	A
	11	-	-	-	-	-	-	-	-	C
	15	-	-	-	-	-	-	7	7	D
	20	-	-	-	-	-	3	9	12	F
	25	-	-	-	-	-	6	10	16	G
	30	-	-	-	-	-	9	10	19	H
	35	-	-	-	-	3	8	16	27	I
	40	-	-	-	-	5	8	24	37	J
	45	-	-	-	-	6	9	31	46	K
	50	-	-	-	-	7	9	38	54	M
	55	-	-	-	-	8	10	44	62	N
	60	-	-	-	2	7	10	51	70	
	65	-	-	-	3	7	15	55	80	
	70	-	-	-	4	7	19	62	92	
	75	-	-	-	4	8	23	68	103	
	80	-	-	-	5	8	26	77	116	
	85	-	-	-	5	9	30	86	130	
	90	-	-	-	6	9	34	95	144	
	95	-	-	-	6	9	38	105	158	
	100	-	-	-	7	9	42	114	172	
	105	-	-	-	7	12	45	123	187	
	110	-	-	-	8	15	48	130	201	
36	5	-	-	-	-	-	-	-	-	A
	9	-	-	-	-	-	-	-	-	B
	10	-	-	-	-	-	-	3	3	C
	15	-	-	-	-	-	-	9	9	D
	20	-	-	-	-	-	6	9	15	F
	25	-	-	-	-	-	9	10	19	G
	30	-	-	-	-	4	8	14	26	I
	35	-	-	-	-	6	8	24	38	J
	40	-	-	-	-	8	8	32	48	K
	45	-	-	-	3	6	10	38	57	M
	50	-	-	-	4	7	10	46	67	N
	55	-	-	-	5	7	13	53	78	
	60	-	-	-	6	7	18	59	90	
	65	-	-	-	6	8	22	66	102	
	70	-	-	-	7	8	27	75	117	
	75	-	-	-	8	8	31	86	133	
	80	-	-	2	6	9	35	97	149	
	85	-	-	3	6	10	40	107	166	
	90	-	-	3	7	13	42	118	183	
	95	-	-	4	6	16	46	128	200	
	100	-	-	4	7	19	50	136	216	

DCIEM 1983 AIR DIVING TABLE 1 (METRES)
STANDARD AIR

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)							Decom. Time (min)	Repet. Dive Group
		21	18	15	12	9	6	3		
39	5	-	-	-	-	-	-	-	-	A
	8	-	-	-	-	-	-	-	-	B
	10	-	-	-	-	-	-	5	5	C
	15	-	-	-	-	-	4	8	12	E
	20	-	-	-	-	-	8	10	18	G
	25	-	-	-	-	5	7	11	23	H
	30	-	-	-	-	7	8	22	37	J
	35	-	-	-	3	6	9	30	48	K
	40	-	-	-	4	7	9	39	59	M
	45	-	-	-	6	7	10	47	70	N
	50	-	-	-	7	7	15	53	82	
	55	-	-	2	6	8	20	61	97	
	60	-	-	3	6	8	25	70	112	
	65	-	-	4	6	8	30	82	130	
	70	-	-	4	7	9	34	94	148	
	75	-	-	5	6	11	39	106	167	
	80	-	-	5	7	14	42	118	186	
	85	-	-	6	7	17	47	129	206	
	90	-	-	6	8	20	52	138	224	
42	7	-	-	-	-	-	-	-	-	B
	10	-	-	-	-	-	-	7	7	D
	15	-	-	-	-	-	6	9	15	F
	20	-	-	-	-	4	7	10	21	G
	25	-	-	-	-	7	8	17	32	I
	30	-	-	-	4	6	8	28	46	K
	35	-	-	-	5	7	9	37	58	L
	40	-	-	-	7	7	10	46	70	N
	45	-	-	3	5	8	16	53	85	O
	50	-	-	4	6	8	21	62	101	
	55	-	-	5	6	8	27	73	119	
	60	-	-	6	6	9	32	86	139	
	65	-	-	6	7	10	37	99	159	
	70	-	-	7	7	14	40	114	182	
	75	-	3	5	7	18	45	126	204	
	80	-	3	6	7	21	51	137	225	
	85	-	4	5	8	25	57	146	245	
	90	-	4	6	9	29	65	152	263	

DCIEM 1983 AIR DIVING TABLE 1 (METRES)
STANDARD AIR

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)							Decom. Time (min)	Repet. Dive Group
		21	18	15	12	9	6	3		
45	7	-	-	-	-	-	-	-	-	B
	10	-	-	-	-	-	-	9	9	D
	15	-	-	-	-	-	8	9	17	F
	20	-	-	-	-	6	7	11	24	H
	25	-	-	-	4	5	8	23	40	J
	30	-	-	-	6	6	9	34	55	K
	35	-	-	3	5	7	10	44	69	M
	40	-	-	4	6	7	15	52	84	O
	45	-	-	5	6	8	21	61	101	
	50	-	-	6	7	8	27	73	121	
	55	-	3	5	6	9	33	88	144	
	60	-	3	5	7	12	38	103	168	
	65	-	4	5	8	16	42	119	194	
	70	-	5	5	8	20	48	132	218	
	75	-	5	6	8	24	55	142	240	
	80	-	6	6	8	28	63	150	261	
48	6	-	-	-	-	-	-	-	-	B
	10	-	-	-	-	-	-	11	11	D
	15	-	-	-	-	4	6	10	20	G
	20	-	-	-	-	8	8	14	30	H
	25	-	-	-	6	6	8	29	49	K
	30	-	-	3	5	7	9	40	64	M
	35	-	-	5	5	8	13	49	80	N
	40	-	-	6	6	8	20	59	99	
	45	-	3	5	6	9	26	72	121	
	50	-	4	5	7	9	33	88	146	
	55	-	5	5	7	13	38	105	173	
	60	-	6	5	8	17	43	122	201	
	65	-	7	5	8	22	50	135	227	
	70	3	4	6	8	26	58	146	251	
51	6	-	-	-	-	-	-	-	-	B
	10	-	-	-	-	-	5	8	13	D
	15	-	-	-	-	5	7	10	22	G
	20	-	-	-	5	5	8	20	38	I
	25	-	-	3	5	6	9	33	56	K
	30	-	-	5	5	7	10	46	73	M
	35	-	3	4	6	8	18	55	94	O
	40	-	4	5	6	8	26	68	117	
	45	-	5	5	7	9	32	85	143	
	50	-	6	6	7	13	37	105	174	
	55	3	4	6	7	18	44	122	204	
	60	4	4	6	8	23	51	137	233	
	65	5	4	6	9	27	61	148	260	
	70	5	5	6	12	30	72	155	285	

DCIEM 1983 AIR DIVING TABLE 1 (METRES)
STANDARD AIR

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)								Decom. Time (min)	Repet. Dive Group
		24	21	18	15	12	9	6	3		
54	5	-	-	-	-	-	-	-	-	-	B
	10	-	-	-	-	-	-	6	9	15	E
	15	-	-	-	-	-	7	7	11	25	H
	20	-	-	-	-	6	6	8	25	45	J
	25	-	-	-	5	5	7	9	39	65	M
	30	-	-	3	4	6	7	15	50	85	O
	35	-	-	5	4	6	8	23	62	108	
	40	-	-	6	5	7	9	30	80	137	
	45	-	4	4	5	7	13	36	101	170	
	50	-	4	5	5	8	18	42	121	203	
	55	-	5	5	6	8	23	51	137	235	
	60	-	6	5	6	9	28	61	149	264	
57	5	-	-	-	-	-	-	-	-	-	
	10	-	-	-	-	-	-	8	9	17	
	15	-	-	-	-	4	5	7	11	27	
	20	-	-	-	4	4	6	9	29	52	
	25	-	-	-	7	5	7	10	44	73	
	30	-	-	5	4	6	8	19	55	97	
	35	-	3	4	5	6	9	27	72	126	
	40	-	4	4	5	7	11	35	93	159	
	45	-	5	5	5	8	17	41	116	197	
	50	3	3	5	6	8	22	50	135	232	
	55	4	3	5	7	9	27	61	149	265	
60	5	-	-	-	-	-	-	-	-	-	
	10	-	-	-	-	-	-	10	9	19	
	15	-	-	-	-	5	6	8	16	35	
	20	-	-	-	5	5	6	10	33	59	
	25	-	-	5	4	5	7	14	48	83	
	30	-	3	4	4	6	9	23	62	111	
	35	-	5	4	5	6	10	32	84	146	
	40	-	6	4	6	7	15	38	109	185	
	45	4	3	5	6	8	21	47	131	225	
	50	5	4	4	7	9	27	58	147	261	

DCIEM 1983 AIR DIVING TABLE 1 (METRES)
STANDARD AIR

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)										Decom. Time (min)
		30	27	24	21	18	15	12	9	6	3	
63	5	-	-	-	-	-	-	-	-	-	5	5
	10	-	-	-	-	-	-	-	5	6	10	21
	15	-	-	-	-	-	-	7	6	8	20	41
	20	-	-	-	-	-	7	5	7	9	39	67
	25	-	-	-	-	6	4	6	8	17	52	93
	30	-	-	-	5	4	4	7	8	28	71	127
	35	-	-	3	3	4	6	7	12	35	97	167
	40	-	-	4	4	4	6	8	19	43	123	211
	45	-	-	5	4	5	6	9	25	54	142	250
	50	-	3	3	4	6	6	13	29	70	154	288
66	5	-	-	-	-	-	-	-	-	-	7	7
	10	-	-	-	-	-	-	-	7	6	10	23
	15	-	-	-	-	-	4	5	5	9	24	47
	20	-	-	-	-	5	4	5	7	10	43	74
	25	-	-	-	4	4	4	6	8	21	58	105
	30	-	-	3	3	4	5	7	9	32	81	144
	35	-	-	5	3	4	6	7	16	39	110	190
	40	-	3	3	4	4	7	8	23	49	135	238
	45	-	4	3	4	5	7	11	28	65	151	278
69	5	-	-	-	-	-	-	-	-	-	8	8
	10	-	-	-	-	-	-	-	8	7	10	25
	15	-	-	-	-	-	6	4	6	9	28	53
	20	-	-	-	-	6	4	6	7	12	47	82
	25	-	-	-	6	3	5	6	9	24	65	118
	30	-	-	5	3	4	5	7	12	35	93	164
	35	-	3	3	4	4	6	8	19	44	123	214
	40	-	5	3	4	5	6	9	27	57	146	262
72	5	-	-	-	-	-	-	-	-	-	9	9
	10	-	-	-	-	-	-	4	5	7	11	27
	15	-	-	-	-	-	7	5	6	9	32	59
	20	-	-	-	4	4	4	5	8	16	50	91
	25	-	-	4	3	4	5	6	9	28	73	132
	30	-	-	6	3	5	5	8	15	37	106	185
	35	-	5	3	4	4	6	9	23	49	135	238
	40	3	3	3	4	6	6	13	28	67	153	286

APPENDIX IA

DCIEM 1983 AIR DIVING TABLE 1S

"SHORT STANDARD AIR"

DCIEM 1983 AIR DIVING TABLE 18 (METRES)
SHORT STANDARD AIR

Depth (msw)	No Decompression Bottom Times (min)			Decompression Required Bottom Times (min)			
9	60 C 90 D	120 F 180 H	400				
12	60 D	120 H	175 L	190	200	206	213
15	30 C	50 E	75 G	100 I	120 K	126 K	132 L
18	20 B	30 D	50 F	60 G	80 I	87 J	91 J
21	15 B	25 D	35 E	40 F	53 H	65 I	68 J
24	10 A	20 D	25 E	30 F	37 G	50 H	54 I
27	10 A	15 C	20 D	24 E	28 F	38 H	44 I
30	5 A	10 B	15 D	18 D	22 F	30 G	37 H
33	5 A	10 B	12 C	15 D	18 D	24 G	31 H
36		5 A	10 C	12 D	15 D	19 F	25 G
39		5 A	8 B	10 C	13 D	17 F	21 G
42		5 A	7 B	9 C	12 D	14 F	18 G
45			7 B	8 C	10 D	13 F	16 G
Decompression Time (minutes)			6 msw	-	-	5	10
			3 msw	5	10	10	10

INSTRUCTIONS

1. Descent and ascent rates at 18 msw/min.
2. Bottom time includes descent time.
3. Decompression stop times include ascent time to that stop.
4. Letter after bottom time gives repetitive dive group.

APPENDIX II

DCIEM 1983 AIR DIVING TABLE

"IN-WATER O_2"

DCIEM 1983 AIR DIVING TABLE 2 (METRES)
IN-WATER OXYGEN DECOMPRESSION

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)						Decom. Time (min)	Repet. Dive Group
		Air					O_2		
		24	21	18	15	12	9		
15	130	-	-	-	-	-	10	11	J
	140	-	-	-	-	-	14	15	K
	160	-	-	-	-	-	19	20	
	180	-	-	-	-	-	23	24	
	200	-	-	-	-	-	27	28	
	220	-	-	-	-	-	31	32	
	240	-	-	-	-	-	35	36	
	260	-	-	-	-	-	38	39	
	280	-	-	-	-	-	41	42	
18	90	-	-	-	-	-	11	12	J
	100	-	-	-	-	-	16	17	J
	110	-	-	-	-	-	19	20	K
	120	-	-	-	-	-	23	24	K
	140	-	-	-	-	-	28	29	
	160	-	-	-	-	-	34	35	
	180	-	-	-	-	-	39	40	
	200	-	-	-	-	-	44	45	
	220	-	-	-	-	-	49	50	
	240	-	-	-	-	-	53	54	
21	70	-	-	-	-	-	13	14	I
	80	-	-	-	-	-	19	20	J
	90	-	-	-	-	-	23	24	K
	100	-	-	-	-	-	27	28	K
	110	-	-	-	-	-	31	32	
	120	-	-	-	-	-	35	36	
	130	-	-	-	-	-	38	39	
	140	-	-	-	-	-	41	42	
	150	-	-	-	-	-	45	46	
	160	-	-	-	-	-	48	49	
	170	-	-	-	-	-	51	52	
	180	-	-	-	-	-	54	55	
	190	-	-	-	-	-	58	59	
	200	-	-	-	-	-	61	62	

DCIEM 1983 AIR DIVING TABLE 2 (METRES)
IN-WATER OXYGEN DECOMPRESSION

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)						Decom. Time (min)	Repet. Dive Group
		Air					O_2		
		24	21	18	15	12	9		
24	50	-	-	-	-	-	9	10	H
	55	-	-	-	-	-	13	14	H
	60	-	-	-	-	-	17	18	I
	70	-	-	-	-	-	24	25	J
	80	-	-	-	-	-	29	30	K
	90	-	-	-	-	-	33	34	
	100	-	-	-	-	-	38	39	
	110	-	-	-	-	-	42	43	
	120	-	-	-	-	-	46	47	
	130	-	-	-	-	-	50	51	
	140	-	-	-	-	-	54	55	
	150	-	-	-	-	-	58	59	
	160	-	-	-	-	-	63	64	
27	40	-	-	-	-	-	10	11	G
	45	-	-	-	-	-	12	13	H
	50	-	-	-	-	-	18	19	H
	55	-	-	-	-	-	23	24	I
	60	-	-	-	-	-	26	27	J
	70	-	-	-	-	-	32	33	
	80	-	-	-	-	-	37	38	
	90	-	-	-	-	-	43	44	
	100	-	-	-	-	-	48	49	
	110	-	-	-	-	-	53	54	
	120	-	-	-	-	-	58	59	
30	30	-	-	-	-	-	10	11	F
	35	-	-	-	-	-	11	12	G
	40	-	-	-	-	-	16	17	H
	45	-	-	-	-	-	22	23	I
	50	-	-	-	-	-	26	27	I
	55	-	-	-	-	-	30	31	J
	60	-	-	-	-	-	34	35	
	70	-	-	-	-	-	40	41	
	80	-	-	-	-	-	46	47	
	90	-	-	-	-	2	51	54	
	100	-	-	-	-	3	56	60	
	110	-	-	-	-	4	62	67	

DCIEM 1983 AIR DIVING TABLE 2 (METRES)
IN-WATER OXYGEN DECOMPRESSION

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)						Decom. Time (min)	Repet. Dive Group
		Air					O_2		
		24	21	18	15	12	9		
33	25	-	-	-	-	-	10	11	F
	30	-	-	-	-	-	12	13	G
	35	-	-	-	-	-	17	18	H
	40	-	-	-	-	-	23	24	I
	45	-	-	-	-	-	29	30	J
	50	-	-	-	-	-	33	34	K
	55	-	-	-	-	-	37	38	K
	60	-	-	-	-	2	39	42	
	65	-	-	-	-	3	42	46	
	70	-	-	-	-	4	46	51	
	75	-	-	-	-	4	49	54	
	80	-	-	-	-	5	52	58	
	85	-	-	-	-	5	56	62	
	90	-	-	-	-	6	59	66	
	95	-	-	-	-	6	62	69	
	100	-	-	-	-	7	66	74	
	105	-	-	-	-	7	69	77	
	110	-	-	-	-	8	73	82	
36	20	-	-	-	-	-	10	11	F
	25	-	-	-	-	-	12	13	G
	30	-	-	-	-	-	15	16	H
	35	-	-	-	-	-	24	25	H
	40	-	-	-	-	-	30	31	I
	45	-	-	-	-	3	33	37	J
	50	-	-	-	-	4	37	42	K
	55	-	-	-	-	5	41	47	
	60	-	-	-	-	6	45	52	
	65	-	-	-	-	6	49	56	
	70	-	-	-	-	7	52	60	
	75	-	-	-	-	8	56	65	
	80	-	-	-	2	6	60	69	
	85	-	-	-	3	6	64	74	
	90	-	-	-	3	7	68	79	
	95	-	-	-	4	6	72	83	
	100	-	-	-	4	7	76	88	

DCIEM 1983 AIR DIVING TABLE 2 (METRES)
IN-WATER OXYGEN DECOMPRESSION

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)						Decom. Time (min)	Repet. Dive Group
		Air					O_2		
		24	21	18	15	12	9		
39	20	-	-	-	-	-	12	13	G
	25	-	-	-	-	-	14	15	G
	30	-	-	-	-	-	22	23	H
	35	-	-	-	-	3	28	32	I
	40	-	-	-	-	4	33	38	J
	45	-	-	-	-	6	38	45	L
	50	-	-	-	-	7	42	50	
	55	-	-	-	2	6	46	55	
	60	-	-	-	3	6	51	61	
	65	-	-	-	4	6	55	66	
	70	-	-	-	4	7	59	71	
	75	-	-	-	5	6	64	76	
	80	-	-	-	5	7	68	81	
	85	-	-	-	6	7	73	87	
	90	-	-	-	6	8	78	93	
42	15	-	-	-	-	-	10	11	D
	20	-	-	-	-	-	14	15	G
	25	-	-	-	-	-	18	19	H
	30	-	-	-	-	4	26	31	I
	35	-	-	-	-	5	32	38	J
	40	-	-	-	-	7	37	45	K
	45	-	-	-	3	5	43	52	M
	50	-	-	-	4	6	47	58	
	55	-	-	-	5	6	52	64	
	60	-	-	-	6	6	57	70	
	65	-	-	-	6	7	62	76	
	70	-	-	-	7	7	67	82	
	75	-	-	3	5	7	72	88	
	80	-	-	3	6	7	77	94	
	85	-	-	4	5	8	83	101	
	90	-	-	4	6	8	89	108	

DCIEM 1983 AIR DIVING TABLE 2 (METRES)
IN-WATER OXYGEN DECOMPRESSION

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)						Decom. Time (min)	Repet. Dive Group
		Air					O_2		
		24	21	18	15	12	9		
45	15	-	-	-	-	-	12	13	F
	20	-	-	-	-	-	15	16	G
	25	-	-	-	-	4	22	27	H
	30	-	-	-	-	6	30	37	I
	35	-	-	-	3	5	36	45	K
	40	-	-	-	4	6	42	53	M
	45	-	-	-	5	6	47	59	
	50	-	-	-	6	7	52	66	
	55	-	-	3	5	6	58	73	
	60	-	-	3	5	7	63	79	
	65	-	-	4	5	8	69	87	
	70	-	-	5	5	8	75	94	
	75	-	-	5	6	8	81	101	
	80	-	-	6	6	8	87	108	
48	15	-	-	-	-	-	13	14	F
	20	-	-	-	-	-	17	18	G
	25	-	-	-	-	6	26	33	I
	30	-	-	-	3	5	34	43	J
	35	-	-	-	5	5	40	51	L
	40	-	-	-	6	6	46	59	
	45	-	-	3	5	6	52	67	
	50	-	-	4	5	7	58	75	
	55	-	-	5	5	7	64	82	
	60	-	-	6	5	8	70	90	
	65	-	-	7	5	8	77	98	
	70	-	3	4	6	8	84	106	
51	15	-	-	-	-	-	15	16	G
	20	-	-	-	-	5	20	26	H
	25	-	-	-	3	5	30	39	J
	30	-	-	-	5	5	38	49	K
	35	-	-	3	4	6	44	58	M
	40	-	-	4	5	6	51	67	
	45	-	-	5	5	7	57	75	
	50	-	-	6	6	7	64	84	
	55	-	3	4	6	7	71	92	
	60	-	4	4	6	8	78	101	
	65	-	5	4	6	9	86	111	
	70	-	5	5	6	12	93	122	

DCIEM 1983 AIR DIVING TABLE 2 (METRES)
IN-WATER OXYGEN DECOMPRESSION

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)						Decom. Time (min)	Repet. Dive Group
		Air					O_2		
		24	21	18	15	12	9		
54	15	-	-	-	-	-	16	17	G
	20	-	-	-	-	6	24	31	H
	25	-	-	-	5	5	34	45	J
	30	-	-	3	4	6	41	55	M
	35	-	-	5	4	6	48	64	
	40	-	-	6	5	7	55	74	
	45	-	4	4	5	7	63	84	
	50	-	4	5	5	8	70	93	
	55	-	5	5	6	8	78	103	
	60	-	6	5	6	9	86	113	
57	10	-	-	-	-	-	12	13	
	15	-	-	-	-	4	14	19	
	20	-	-	-	4	4	28	37	
	25	-	-	-	7	5	37	50	
	30	-	-	5	4	6	45	61	
	35	-	3	4	5	6	52	71	
	40	-	4	4	5	7	60	81	
	45	-	5	5	5	8	68	92	
	50	3	3	5	6	8	77	103	
	55	4	3	5	7	9	86	115	
60	10	-	-	-	-	-	13	14	
	15	-	-	-	-	5	16	22	
	20	-	-	-	5	5	31	42	
	25	-	-	5	4	5	40	55	
	30	-	3	4	4	6	49	67	
	35	-	5	4	5	6	57	78	
	40	-	6	4	6	7	65	89	
	45	4	3	5	6	8	75	102	
	50	5	4	4	7	9	84	114	

DCIEM 1[illegible] AIR DIVING TABLE 2 (METRES)
IN-WATER OXYGEN DECOMPRESSION

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)								Decom. Time (min)
		Air							O_2	
		30	27	24	21	18	15	12	9	
63	10	-	-	-	-	-	-	-	14	15
	15	-	-	-	-	-	-	7	21	29
	20	-	-	-	-	-	7	5	33	46
	25	-	-	-	-	6	4	6	43	60
	30	-	-	-	5	4	4	7	52	73
	35	-	-	3	3	4	6	7	61	85
	40	-	-	4	4	4	6	8	71	98
	45	-	-	5	4	5	6	9	81	111
	50	-	3	3	4	6	6	13	91	127
66	10	-	-	-	-	-	-	-	15	16
	15	-	-	-	-	-	4	5	24	34
	20	-	-	-	-	5	4	5	36	51
	25	-	-	-	4	4	4	6	47	66
	30	-	-	3	3	4	5	7	56	79
	35	-	-	5	3	4	6	7	66	92
	40	-	3	3	4	4	7	8	77	107
	45	-	4	3	4	5	7	11	88	123
69	10	-	-	-	-	-	-	-	17	18
	15	-	-	-	-	-	6	4	27	38
	20	-	-	-	-	6	4	6	39	56
	25	-	-	-	6	3	5	6	50	71
	30	-	-	5	3	4	5	7	60	85
	35	-	3	3	4	4	6	8	72	101
	40	-	5	3	4	5	6	9	84	117
72	10	-	-	-	-	-	-	4	14	19
	15	-	-	-	-	-	7	5	29	42
	20	-	-	-	4	4	4	5	42	60
	25	-	-	4	3	4	5	6	53	76
	30	-	-	6	3	5	5	8	65	93
	35	-	5	3	4	4	6	9	77	109
	40	3	3	3	4	6	6	13	90	129

APPENDIX IIA

DCIEM 1983 AIR DIVING TABLE

"SHORT IN-WATER O_2"

DCIEM 1983 AIR DIVING TABLE 2S (METRES)
SHORT IN-WATER O_2 DECOMPRESSION

Depth (msw)	No-Decompression Bottom Times (min)			Decompression Required Bottom Times (min)			
15	30 C	50 E	75 G	120 J	130 J	145	165
18	15 B	30 D	50 F	80 H	90 J	100 J	115 K
21	15 B	25 D	35 F	47 F	67 H	74 I	84 J
24	10 A	20 D	25 E	34 F	53 H	58 H	65 I
27	10 A	15 C	20 D	26 E	42 G	48 H	53 I
30	5 A	10 B	15 D	21 D	35 G	40 H	45 I
33	5 A	10 B	12 C	17 D	29 G	35 H	38 H
36		5 A	10 C	15 D	24 G	30 H	33 H
39		5 A	8 B	13 D	20 G	27 G	29 H
42		5 A	7 B	11 D	18 F	24 G	26 H
45			7 B	10 D	16 F	22 G	24 H
48			6 B	9 C	14 F	20 G	21 H
51			6 B	8 C	13 E	18 G	20 H
54			5 B	8 C	11 E	16 G	18 G
Decompression Time (min) O_2 at 9 msw				5	10	15	20

INSTRUCTIONS

1. Descent and ascent rates at 18 msw/min.
2. Bottom time includes descent time.
3. Decompression times are O_2 times only, and does not include the ascent time to 9 msw.
4. Letter after bottom time gives repetitive dive group.

APPENDIX III

DCIEM 1983 AIR DIVING TABLE

"SURD O_2"

DCIEM 1983 AIR DIVING TABLE 3 (METRES)
SURFACE DECOMPRESSION WITH OXYGEN

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)								Decom. Time (min)	Repet. Dive Group
		In-Water Stops						Surface Interval	Chamber O_2		
		Air									
		24	21	18	15	12	9		12		
18	80	-	-	-	-	-	-	Time from leaving the 9 msw stop (or the bottom, if no in-water stop is required) to reaching the 12 msw Chamber stop must not exceed 7 minutes.	16	25	H
	90	-	-	-	-	-	-		20	29	I
	100	-	-	-	-	-	-		24	33	J
	110	-	-	-	-	-	-		28	37	K
	120	-	-	-	-	-	-		30	39	K
	130	-	-	-	-	-	-		32*	46	
	140	-	-	-	-	-	-		38*	52	
	150	-	-	-	-	-	-		42*	56	
	160	-	-	-	-	-	-		46*	60	
	170	-	-	-	-	-	-		50*	64	
	180	-	-	-	-	-	-		54*	68	
	190	-	-	-	-	-	-		57*	71	
	200	-	-	-	-	-	-		60*	74	
	210	-	-	-	-	-	-		63**	82	
	220	-	-	-	-	-	-		69**	88	
	230	-	-	-	-	-	-		73**	92	
	240	-	-	-	-	-	-		77**	96	
21	60	-	-	-	-	-	-		15	24	H
	70	-	-	-	-	-	-		21	30	I
	80	-	-	-	-	-	-		26	35	J
	90	-	-	-	-	-	-		30	39	K
	100	-	-	-	-	-	-		34*	48	K
	110	-	-	-	-	-	-		40*	54	
	120	-	-	-	-	-	-		45*	59	
	130	-	-	-	-	-	-		50*	64	
	140	-	-	-	-	-	-		55*	69	
	150	-	-	-	-	-	-		59*	73	
	160	-	-	-	-	-	-		63**	82	
	170	-	-	-	-	-	-		71**	90	
	180	-	-	-	-	-	-		76**	95	
	190	-	-	-	-	-	-		81**	100	
	200	-	-	-	-	-	1		85**	105	

Note: asterisk (*) indicates number of 5 min air breaks required

DCIEM 1983 AIR DIVING TABLE 3 (METRES)
SURFACE DECOMPRESSION WITH OXYGEN

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)								Decom. Time (min)	Repet. Dive Group
		In-Water Stops						Surface Interval	Chamber		
		Air							O_2		
		24	21	18	15	12	9		12		
24	50	-	-	-	-	-	-	Time from leaving the 9 msw stop (or the bottom, if no in-water stop is required) to reaching the 12 msw Chamber stop must not exceed 7 minutes.	17	26	H
	55	-	-	-	-	-	-		21	30	H
	60	-	-	-	-	-	-		24	33	I
	70	-	-	-	-	-	-		30	39	J
	80	-	-	-	-	-	-		35*	49	K
	90	-	-	-	-	-	-		42*	56	
	100	-	-	-	-	-	-		47*	63	
	110	-	-	-	-	-	2		53*	69	
	120	-	-	-	-	-	3		58*	75	
	130	-	-	-	-	-	4		62**	85	
	140	-	-	-	-	-	4		72**	95	
	150	-	-	-	-	-	5		78**	102	
	160	-	-	-	-	-	5		84**	108	
27	40	-	-	-	-	-	-		16	25	G
	45	-	-	-	-	-	-		21	30	H
	50	-	-	-	-	-	-		25	34	H
	55	-	-	-	-	-	1		28	38	I
	60	-	-	-	-	-	2		30*	46	J
	70	-	-	-	-	-	3		37*	54	
	80	-	-	-	-	-	4		45*	63	
	90	-	-	-	-	-	5		52*	71	
	100	-	-	-	-	-	6		58*	78	
	110	-	-	-	-	-	7		65**	91	
	120	-	-	-	-	-	8		74**	101	
30	35	-	-	-	-	-	-		17	26	G
	40	-	-	-	-	-	2		22	33	H
	45	-	-	-	-	-	3		27	39	I
	50	-	-	-	-	-	4		30	43	I
	55	-	-	-	-	-	5		31*	50	J
	60	-	-	-	-	-	6		37*	57	
	70	-	-	-	-	-	7		46*	67	
	80	-	-	-	-	-	8		54*	76	
	90	-	-	-	-	2	8		60*	84	
	100	-	-	-	-	3	8		72**	102	
	110	-	-	-	-	4	8		81**	112	

Note: asterisk (*) indicates number of 5 min air breaks required

DCIEM 1983 AIR DIVING TABLE 3 (METRES)
SURFACE DECOMPRESSION WITH OXYGEN

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)								Decom. Time (min)	Repet. Dive Group
		In-Water Stops						Surface Interval	Chamber O_2		
		Air									
		24	21	18	15	12	9		12		
33	30	-	-	-	-	-	2	Time from leaving the 9 msw stop to reaching the 12 msw Chamber stop must not exceed 7 minutes.	16	27	G
	35	-	-	-	-	-	3		22	34	H
	40	-	-	-	-	-	5		27	41	I
	45	-	-	-	-	-	6		30•	50	J
	50	-	-	-	-	-	7		35•	56	K
	55	-	-	-	-	-	8		40•	62	K
	60	-	-	-	-	2	7		45•	68	
	65	-	-	-	-	3	7		50•	74	
	70	-	-	-	-	4	7		54•	79	
	75	-	-	-	-	4	8		59•	85	
	80	-	-	-	-	5	8		60••	92	
	85	-	-	-	-	5	9		69••	102	
	90	-	-	-	-	6	9		75••	109	
	95	-	-	-	-	6	9		80••	114	
	100	-	-	-	-	7	9		85••	120	
	105	-	-	-	-	7	12		89••	127	
	110	-	-	-	-	8	15		93•••	140	
36	25	-	-	-	-	-	2		13	24	G
	30	-	-	-	-	-	4		21	34	G
	35	-	-	-	-	-	6		27	42	H
	40	-	-	-	-	-	8		30•	52	I
	45	-	-	-	-	3	6		36•	59	J
	50	-	-	-	-	4	7		42•	67	K
	55	-	-	-	-	5	7		48•	74	
	60	-	-	-	-	6	7		53•	80	
	65	-	-	-	-	6	8		58•	86	
	70	-	-	-	-	7	8		60••	94	
	75	-	-	-	-	8	8		70••	105	
	80	-	-	-	2	6	9		76••	112	
	85	-	-	-	3	6	10		82••	120	
	90	-	-	-	3	7	13		87••	129	
	95	-	-	-	4	6	16		90••	135	
	100	-	-	-	4	7	19		100•••	154	

Note: asterisk (•) indicates number of 5 min air breaks required

DCIEM 1983 AIR DIVING TABLE 3 (METRES)
SURFACE DECOMPRESSION WITH OXYGEN

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)								Decom. Time (min)	Repet. Dive Group
		In-Water Stops						Surface Interval	Chamber O_2		
		Air									
		24	21	18	15	12	9		12		
39	25	-	-	-	-	-	5	Time from leaving the 9 msw stop to reaching the 12 msw Chamber stop must not exceed 7 minutes.	18	32	G
	30	-	-	-	-	-	7		26	42	H
	35	-	-	-	-	3	6		30*	53	I
	40	-	-	-	-	4	7		36*	61	J
	45	-	-	-	-	6	7		43*	70	K
	50	-	-	-	-	7	7		49*	77	
	55	-	-	-	2	6	8		54*	84	
	60	-	-	-	3	6	8		60*	91	
	65	-	-	-	4	6	8		67**	104	
	70	-	-	-	4	7	9		75**	114	
	75	-	-	-	5	6	11		81**	122	
	80	-	-	-	5	7	14		87**	132	
	85	-	-	-	6	7	17		90***	144	
	90	-	-	-	6	8	20		101***	159	
42	20	-	-	-	-	-	4		12	25	G
	25	-	-	-	-	-	7		23	39	H
	30	-	-	-	-	4	6		30	49	I
	35	-	-	-	-	5	7		34*	60	J
	40	-	-	-	-	7	7		42*	70	K
	45	-	-	-	3	5	8		49*	79	M
	50	-	-	-	4	6	8		55*	87	
	55	-	-	-	5	6	8		60**	98	
	60	-	-	-	6	6	9		70**	110	
	65	-	-	-	6	7	10		78**	120	
	70	-	-	-	7	7	14		84**	131	
	75	-	-	3	5	7	18		90**	142	
	80	-	-	3	6	7	21		100***	161	
	85	-	-	4	5	8	25		107***	173	
	90	-	-	4	6	8	28		113***	183	

Note: asterisk (*) indicates number of 5 min air breaks required

DCIEM 1983 AIR DIVING TABLE 3 (METRES)
SURFACE DECOMPRESSION WITH OXYGEN

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)							Decom. Time (min)	Repet. Dive Group
		In-Water Stops						Surface Interval	Chamber O_2		
		Air									
		24	21	18	15	12	9		12		
45	20	-	-	-	-	-	6	Time from leaving the 9 msw stop to reaching the 12 msw Chamber stop must not exceed 7 minutes.	17	32	G
	25	-	-	-	-	4	5		27	45	H
	30	-	-	-	-	6	6		30•	56	I
	35	-	-	-	3	5	7		40•	69	K
	40	-	-	-	4	6	7		48•	79	M
	45	-	-	-	5	6	8		55•	88	
	50	-	-	-	6	7	8		60••	100	
	55	-	-	3	5	6	9		72••	114	
	60	-	-	3	5	7	12		80••	126	
	65	-	-	4	5	8	16		87••	139	
	70	-	-	5	5	8	20		95•••	157	
	75	-	-	5	6	8	24		105•••	172	
	80	-	-	6	6	8	28		111•••	183	
48	20	-	-	-	-	-	8		21	38	G
	25	-	-	-	-	6	6		30	51	I
	30	-	-	-	3	5	7		37•	66	J
	35	-	-	-	5	5	8		46•	78	L
	40	-	-	-	6	6	8		54•	88	
	45	-	-	3	5	6	9		60•	97	
	50	-	-	4	5	7	9		72••	116	
	55	-	-	5	5	7	13		81••	130	
	60	-	-	6	5	8	17		88••	143	
	65	-	-	7	5	8	22		99•••	165	
	70	-	3	4	6	8	26		108•••	179	
51	15	-	-	-	-	-	5		11	25	G
	20	-	-	-	-	5	5		25	44	H
	25	-	-	-	3	5	6		30•	58	J
	30	-	-	-	5	5	7		42•	73	K
	35	-	-	3	4	6	8		51•	86	M
	40	-	-	4	5	6	8		60•	97	
	45	-	-	5	5	7	9		70••	115	
	50	-	-	6	6	7	13		80••	131	
	55	-	3	4	6	7	18		89••	146	
	60	-	4	4	6	8	23		101•••	170	
	65	-	5	4	6	9	27		110•••	185	
	70	-	5	5	6	12	30		117•••	199	

Note: asterisk (•) indicates number of 5 min air breaks required

DCIEM 1983 AIR DIVING TABLE 3 (METRES)
SURFACE DECOMPRESSION WITH OXYGEN

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)								Decom. Time (min)	Repet. Dive Group
		In-Water Stops						Surface Interval	Chamber O_2		
		Air									
		24	21	18	15	12	9		12		
54	15	-	-	-	-	-	7	Time from leaving the 9 msw stop to reaching the 12 msw Chamber stop must not exceed 7 minutes.	15	31	G
	20	-	-	-	-	6	6		28	49	H
	25	-	-	-	5	5	7		36*	67	J
	30	-	-	3	4	6	7		47*	81	M
	35	-	-	5	4	6	8		56*	93	
	40	-	-	6	5	7	9		66**	112	
	45	-	4	4	5	7	13		78**	130	
	50	-	4	5	5	8	18		88**	147	
	55	-	5	5	6	8	23		101***	172	
	60	-	6	5	6	9	28		110***	188	
57	15	-	-	-	-	4	5		19	37	
	20	-	-	-	4	4	6		30	53	
	25	-	-	-	7	5	7		41*	74	
	30	-	-	5	4	6	8		52*	89	
	35	-	3	4	5	6	9		60*	101	
	40	-	4	4	5	7	11		75**	125	
	45	-	5	5	5	8	17		85**	144	
	50	3	3	5	6	8	22		99***	170	
	55	4	3	5	7	9	27		110***	189	
60	15	-	-	-	-	5	6		22	42	
	20	-	-	-	5	5	6		31*	61	
	25	-	-	5	4	5	7		45*	80	
	30	-	3	4	4	6	9		56*	96	
	35	-	5	4	5	6	10		69**	118	
	40	-	6	4	6	7	15		82**	139	
	45	4	3	5	6	8	21		92***	163	
	50	5	4	4	7	9	27		108***	188	

Note: asterisk (*) indicates number of 5 min air breaks required

DCIEM 1983 AIR DIVING TABLE 3 (METRES)
SURFACE DECOMPRESSION WITH OXYGEN

Depth (msw)	Bottom Time (min)	Stop Times (min) at Different Depths (msw)										Decom. Time (min)
		In-Water Stops								Surface Interval	Chamber O_2	
		Air										
		30	27	24	21	18	15	12	9		12	
63	15	-	-	-	-	-	-	7	6	Time from leaving the 9 msw stop to reaching the 12 msw Chamber stop must not exceed 7 minutes.	25	47
	20	-	-	-	-	-	7	5	7		36*	69
	25	-	-	-	-	6	4	6	8		49*	87
	30	-	-	-	5	4	4	7	8		60*	102
	35	-	-	3	3	4	6	7	12		76**	130
	40	-	-	4	4	4	6	8	19		88**	152
	45	-	-	5	4	5	6	9	25		105***	183
	50	-	3	3	4	6	6	13	20		116***	204
66	15	-	-	-	-	-	4	5	5		28	51
	20	-	-	-	-	5	4	5	7		40*	75
	25	-	-	-	4	4	4	6	8		54*	94
	30	-	-	3	3	4	5	7	9		68**	118
	35	-	-	5	3	4	6	7	16		83**	143
	40	-	3	3	4	4	7	8	23		99***	175
	45	-	4	3	4	5	7	11	28		112***	198
69	15	-	-	-	-	-	6	4	6		30	55
	20	-	-	-	-	6	4	6	7		44*	81
	25	-	-	-	6	3	5	6	9		58*	101
	30	-	-	5	3	4	5	7	12		75**	130
	35	-	3	3	4	4	6	8	19		89**	155
	40	-	5	3	4	5	6	9	27		107***	190
72	15	-	-	-	-	-	7	5	6		30*	62
	20	-	-	-	4	4	4	5	8		48*	87
	25	-	-	4	3	4	5	6	9		60**	110
	30	-	-	6	3	5	5	8	15		80**	141
	35	-	5	3	4	4	6	9	23		98***	176
	40	3	3	3	4	6	6	13	28		114***	204

Note: asterisk (*) indicates number of 5 min air breaks required

APPENDIX IV

DCIEM 1983 AIR DIVING TABLE

"REPETITIVE FACTORS"

DCIEM 1983 AIR DIVING TABLE 4
REPETITIVE DIVE FACTORS

Repetitive Dive Group First Dive	Surface Intervals (hr:min)								
	0:30 →0:59	1:00 →1:29	1:30 →1:59	2:00 →2:59	3:00 →3:59	4:00 →5:59	6:00 →8:59	9:00 →11:59	12:00 →18:00
A	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0
B	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.0
C	1.4	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.0
D	1.5	1.4	1.3	1.3	1.2	1.2	1.1	1.1	1.0
E	1.6	1.5	1.4	1.3	1.3	1.2	1.2	1.1	1.1
F	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1.1
G	1.9	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1
H	-	1.9	1.7	1.6	1.5	1.4	1.3	1.1	1.1
I	-	2.0	1.8	1.7	1.5	1.4	1.3	1.1	1.1
J	-	-	1.9	1.8	1.6	1.5	1.3	1.2	1.1
K	-	-	2.0	1.9	1.7	1.5	1.3	1.2	1.1
L	-	-	-	2.0	1.7	1.6	1.4	1.2	1.1
M	-	-	-	-	1.8	1.6	1.4	1.2	1.1
N	-	-	-	-	1.9	1.7	1.4	1.2	1.1
O	-	-	-	-	2.0	1.7	1.4	1.2	1.1

INSTRUCTIONS

1. Determine the **First Dive** Group from the table used.
2. Find the **Repetitive Factor (RF)** from this table under the appropriate **Surface Interval.**
3. Multiply the **Bottom Time** of the **Second Dive** by this **RF** to obtain the **Effective Bottom Time (EBT).**
4. Decompress for the **Depth** and **EBT** of the **Second Dive.**

APPENDIX V

DCIEM 1983 AIR DIVING TABLE

"DEPTH CORRECTIONS"

FOR DIVING AT ALTITUDE

DCIEM 1983 AIR DIVING TABLE 5 (METRES)
DEPTH CORRECTION FOR DIVING AT ALTITUDE

Actual Depth (msw)	Depth Correction (msw) at Altitude (metres)								
	100 →300	300 →600	600 →900	900 →1200	1200 →1500	1500 →1800	1800 →2100	2100 →2400	2400 →3000
9	+0	+3	+3	+3	+3	+3	+3	+6	+6
12	+0	+3	+3	+3	+3	+3	+6	+6	+6
15	+0	+3	+3	+3	+3	+6	+6	+6	+6
18	+0	+3	+3	+3	+6	+6	+6	+6	+9
21	+0	+3	+3	+3	+6	+6	+6	+9	+9
24	+0	+3	+3	+6	+6	+6	+9	+9	+12
27	+0	+3	+3	+6	+6	+6	+9	+9	+12
30	+0	+3	+3	+6	+6	+9	+9	+9	+12
33	+0	+3	+6	+6	+6	+9	+9	+12	+15
36	+0	+3	+6	+6	+6	+9	+9	+12	+15
39	+0	+3	+6	+6	+9	+9	+12	+12	+15
42	+0	+3	+6	+6	+9	+9	+12	+12	+18
45	+3	+3	+6	+6	+9	+9	+12	+15	+18
48	+3	+6	+6	+9	+9	+12	+12	+15	+18
51	+3	+6	+6	+9	+9	+12	+15	+15	+21
54	+3	+6	+6	+9	+9	+12	+15	+15	
57	+3	+6	+6	+9	+12	+12	+15		
60	+3	+6	+6	+9	+12	+12			
63	+3	+6	+6	+9					
66	+3	+6							
69	+3								

Sea Level Stop Depth (msw)	Actual Stop Depth (msw) at Altitude (metres)								
	100 →300	300 →600	600 →900	900 →1200	1200 →1500	1500 →1800	1800 →2100	2100 →2400	2400 →3000
3	3.0	3.0	3.0	3.0	3.0	2.5	2.5	2.5	2.5
6	6.0	6.0	6.0	5.5	5.5	5.0	5.0	5.0	4.5
9	9.0	9.0	8.5	8.5	8.0	7.5	7.5	7.0	7.0
12	12.0	12.0	11.5	11.0	10.5	10.0	10.0	9.5	9.0
15	15.0	14.5	14.0	13.5	13.0	12.5	12.0	12.0	11.5
18	18.0	17.5	17.0	16.5	16.0	15.0	14.5	14.0	13.5
21	21.0	20.5	20.0	19.0	18.5	17.5	17.0	16.5	16.0